### Excerpts from NCWM Publication 3 NCWM Policy, Interpretations, and Guidelines, Section 2

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### **Interpretations and Guidelines**

**Note:** This section of the Handbook includes NCWM interpretations, policies, recommendations, inspection outlines, and information on issues that have come before the Conference. Several sections include information on Federal requirements related to the uniform laws and regulations presented in the Handbook. The purpose of this section is to assist users in understanding and applying the uniform regulations and to guide administrators in implementing new programs or procedures. The guidelines or recommendations provided herein should not be construed to redefine any State or local law or limit any jurisdiction from enforcing any law, regulation, or procedure (unless the section describes a specific Federal regulation that preempts local requirements). (Added 1997)

### **2.1.1.** Weight(s) and (or) Measure(s) (L&R, 1985, p. 77)

The measuring elements of a point-of-sale system are "weights and/or measures." Errors in pricing when found in point-of-sale systems come under "Misrepresentation of Pricing" in the weights and measures law, and are under the jurisdiction of weights and measures.

#### Background

A recommendation was made to change the definition of "weights and measures" in the Uniform Weights and Measures Law to specifically define a scanner or point-of-sale system as under weights and measures jurisdiction.

Several State representatives said that they had enforcement problems when a scanner or point-of-sale system was being used and when the price marked on an item (or on the shelf) was not the same as the price printed on the receipt. These officials believe that unless the law specifically defines these devices as "weights and measures," they have no jurisdiction over the devices' function.

The Committee disagreed. The NCWM Uniform Weights and Measures Law has a section that forbids the practice of a different price on the retail shelf as compared with the price provided by a scanner. Section 15 of the Uniform Weights and Measures Law reads:

No person shall misrepresent the price of any commodity or service sold, offered, exposed, or advertised for sale by weight, measure, or count, nor represent the price in any manner calculated or tending to mislead or in any way deceive a person.

This section (plus § 14 forbidding misrepresentation of quantity), if enacted by a State, already provides enforcement authority over scanners and point-of-sale systems.

In addition, the Committee does not wish to set a precedent by listing by name the types of devices that might be considered weights and measures devices. This might provide a potential "loop-hole" for those devices not specifically listed. Finally, the Committee members pointed out that it is the human element (the person reading in data or receiving price updates) that introduces the discrepancies in shelf and receipt prices rather than any inherent incapability of the reading device or scanner. Therefore, it is much more effective to forbid the practice of mispricing rather than focus on a single device or apparatus as the means for obtaining compliance.

### 2.1.2. Section 19(a), Identity

(L&R Committee, 1986, p. 143)

Packaged food not containing meat or poultry does not have to have an identity statement if the identity of the commodity can easily be identified through the wrapper or container.

#### **Background**

Virginia Weights and Measures recommended revision to § 19(a) of the Uniform Weights and Measures Law (UWML) to eliminate the exemption of an identity statement from packages when the item "can easily be identified through the wrapper or container." The Committee is of the opinion that there is merit in retaining the language in § 19(a) of the Uniform Law. Packages of fresh product put up in a retail establishment are considered to be packages as long as a price is attached. If the exemption were eliminated, such packages instead of being marked, for example, "12/89 cents" would have to be marked "lemons, 12/89 cents." It was argued that there could be a problem in deciding whether or not a commodity could "easily be identified (such as might occur in an ethnic specialty grocery or with an exotic produce item). In researching the issue, the Committee has determined that Title 21, § 101.100(b)(3) of the Code of Federal Regulations specifically exempts the food identity statement from having to appear "... if the common or usual name of the food is clearly revealed by its appearance." Since no specific problems of enforcement were brought to the attention of the Committee concerning this issue, the Committee recommends no change to § 19(a) at this time. However, the Committee recommends that § 3.1. and 4. of the Uniform Packaging and Labeling Regulation be noted as follows:

Section 19(a) of the Uniform Weights and Measures Law, and 21 CFR 101.100(b)(3) for non-meat and non-poultry foods, specifically exempt packages from identity statements if the identity of the commodity "can easily be identified through the wrapper or container."

#### 2.1.3. Definition of Net Weight

(L&R, 1987, p. 123)

- 1. It is the intent of this definition to include truck loads of commodities, not just packages ("containers").
- 2. It is not the intent to define the net weight of packaged goods as requiring dry tare ("... excluding ... substance(s) not considered to be part of the commodity" could just as well be interpreted as excluding liquids not considered part of the commodity at the time of sale).
- It is also the intent to permit more specific definitions as the occasion warrants
   . . . material(s) . . . not considered . . . part of the commodity" might include dirt or "foreign material" in

## 2.1.4. Offenses and Penalties, Sale of an Incorrect Device

(L&R, 1987, p. 124)

a commodity).

A jurisdiction seeking to enforce the provision of the Uniform Weights and Measures Law that prohibits the sale of an incorrect device would have to show that the seller knowingly sold or offered for sale for use in commerce an incorrect weight or measure. Under § 22, a seller would not be responsible for actions taken by the purchaser or distributor, in which the seller did not participate or have prior knowledge. Thus, the seller would not be liable:

- (1) if a purchaser or distributor modified a scale obtained from a seller; or,
- (2) if a scale were used in trade after the seller informed the purchaser that the scale was not appropriate for that use.

In cases such as those noted above, the Committee feels that the seller would be protected from prosecution. Only sellers who knowingly violate the provision would be subject to prosecution.

### 2.1.5. Weight: Primary Mill Paper

(L&R, 1990, p. 81)

#### **Interpretation**

Nonconsumer sales of "primary mill paper" were discovered by weights and measures officials to be labeled and invoiced on what was called a "gross weight" basis. Primary mill paper is produced for commercial or industrial companies for subsequent additional processing, such as paper for newspaper or magazine publishers, or sanitary tissue manufacturers. The primary mill paper is cut from "parent rolls," but is still a commercial-sized item weighing from several hundred to several thousands of pounds.

The key to understanding the longstanding trade practice is that the purchaser of such paper specifies not only the quality of the paper being purchased, such as the thickness, surface coating, etc., but the purchaser also specifies the core around which the paper is to be wound, the type of overwrap, the number of overwraps, and such other requirements that will ensure receipt of the primary mill paper in proper condition for subsequent processing. The weight of the core and wrapping is approximately one percent of the gross weight. It is recycled by the purchaser in his own or other paper recovery or reuse systems.

Having reviewed the practices in the industry in the specification and purchasing of primary mill paper, the Committee concludes that the true product is the paper plus the packaging (in order to assure maintenance of quality) and an appropriate core (to ensure a fit on the recipient's equipment). Therefore, in the opinion of the Committee, the sale of primary mill paper is not at all on a gross weight basis. This is and has been a misnomer. The true identity of the purchased product has been misunderstood by weights and measures authorities, further compounded by the industry use of the term "gross weight." The product is the primary mill paper <u>plus</u> the core and overwrap specified by the purchaser.

The Committee therefore believes that the industry should review its invoicing and labeling to clarify that the weight of the specified product is the weight of the primary mill paper, core, and overwrap. Although this weight is the gross weight of the entire item as produced and shipped, it is the net weight of the item as specified by the purchaser.

This interpretation applies only to primary mill paper and is not intended to be applied to all nonconsumer products ordered by specification; it is a narrow interpretation applying to the specific method of sale in this trade, where the service of packaging and the packaging is part of the purchase.

#### 2.2.1. Gift Packages

(Resol. 1975, p. 237)

See also Interpretation 2.2.8.

#### Interpretation

Seasonal gift packages are often put up in retail stores in baskets and other decorative containers using cellophane or other clear flexible wrap to enclose a number of similar or dissimilar prepackaged items (cheese, jellies, sausages, wine, fruit, for examples). The resulting combination or variety package must have a legally conforming label including the net contents statement.

#### 2.2.2. Sand

(L&R, 1978, p. 151)

#### Interpretation

Sand put up in permanent wooden bins is a consumer package and must be labeled with all mandatory information as required by the Uniform Packaging and Labeling Regulation.

#### Background

The State of Hawaii raised the issue of the sale of sand in permanent wooden bins and sold by price per cubic measure. The committee agrees with Hawaii that the sale of sand in this manner is subject to the Uniform Packaging and Labeling Regulation, under the definition of "Consumer Package" (§ 2.2. of the Uniform Packaging and Labeling Regulation), and that no further action is needed.

#### 2.2.3. Citrus Sold by 4/5 Bushel

(L&R, 1974, p. 220)

#### Interpretation

The trade practice of crating citrus fruit in 4/5 bushel units is a long-standing one. It is not intended to be a consumer package. If offered as a consumer package, the general consumer usage and trade custom in the particular State would have to be explored:

Section 6.10.(b)(1) of the Uniform Packaging and Labeling Regulation would permit a declaration employing different fractions in the net quantity declaration other than those permitted under § 6.10.(b) if there exists a firmly established practice of using 4/5 bushel in consumer sales and trade custom.

#### **Background**

It has been called to the attention of the committee that certain commodities are being sold to consumers in "unacceptable" fractional units of dry measure in violation of § 6.10. of the Uniform Packaging and Labeling Regulation. Specifically, the Committee has been asked for an interpretation as to whether the packaging of oranges in

a 4/5 bushel, which is later sold unweighed to a consumer, is a violation of the binary submultiple principle as implied in 6.10.(b).

Some Committee members asserted that a clear exception exists under § 6.10.(b)(1) which is applicable to this long established tradition of crating citrus fruit in 4/5 of a bushel. Approximately 85 percent of this fruit is sold by this trade practice. Additionally, it was asserted that the packager never intended the 4/5 bushel to be a consumer package, but if the 4/5 bushel of citrus fruit is sold to consumers, this would be a matter between the appropriate State or local official and the retailer.

The consensus of the Committee is that this action of the packagers is not in violation of the indicated section.

#### 2.2.5. Lot, Shipment, or Delivery

(L&R, 1981, p. 95)

#### **Policy**

The requirements for the average package net contents to meet or exceed the labeled declaration may be applied to production lots, shipments, or deliveries. Shipments or deliveries are smaller collections of packages than production lots that may or may not consist of mixed lot codes.

Emphasis in inspection activities should be placed on warehouse and in-plant testing, without neglecting retail consumer protection.

#### **Background**

The Committee heard a petition from the California Brewers Association to define a lot as:

"a selection of containers under one roof produced by a single company of the same size, type and style, manufactured or packed under similar conditions with a minimum number to be equivalent to one production line shift."

The intention of the petition is to focus Weights and Measures enforcement on production lots as opposed to small collections of packages on retail shelves, because the production lot is under the control of the packager.

An alternative proposal was made that would require mingling of lot and date codes in package inspection at warehouse locations.

The Committee has reviewed the proposals in light of § 7.6. and 12.1. of the Uniform Packaging and Labeling Regulation which refers to "shipment, delivery, or lot." If the petition is approved, the terms "shipment" and

"delivery" would have to be dropped from this Uniform Regulation.

The Committee recognizes the inherent value of in-plant and warehouse inspection and is of the opinion that, wherever possible, such inspections should be carried out. At the same time, the Committee recognizes the need for the State and local weights and measures officials to protect the consumer at the level where the ultimate sale is made. Therefore, the Committee recommends no change to the Uniform Regulation.

The Committee looks forward to the work of the Special Study Group on Enforcement Uniformity of the NCWM which will be exploring the mechanisms that might be instituted to make in-plant inspection workable.

### **2.2.6.** Aerosols and Similar Pressurized Containers (L&R, 1976, p. 248)

See also Guideline 2.2.7.

#### Interpretation

It is the opinion of the NCWM that an FDA opinion as expressed in the Fair Packaging and Labeling Act Manual Guide FDA 7563.7, not objecting to volume declarations on aerosol products, does not supersede or preempt State requirements that aerosols be labeled by net weight.

#### Background

The Department of Commerce through the Office of Weights and Measures of the National Bureau of Standards, under its statutory responsibility for "cooperation with the States in securing uniformity in weights and measures laws and methods of inspection," developed § 10.3.:

#### 10.3. Aerosols and Similar Pressurized Containers.

- The declaration of quantity on an aerosol package, and on a similar pressurized package, shall disclose the net quantity of the commodity (including propellant), in terms of weight, that will be expelled when the instructions for use as shown on the container are followed.

Several States, which are among the 32 that have adopted the Uniform Packaging and Labeling Regulation, indicated that pressurized cans were currently being marked by volume rather than by weight as required above. Industry representatives indicated that according to the Food and Drug Administration, they are permitted to mark this type of container by volume and that for competitive purposes they will continue to do so. The NCWM was asked to contact FDA and inform them that a declaration of volume on pressurized containers is not acceptable to the States since it cannot be verified.

A meeting was requested to express NIST/NCWM's concern over the FDA position on quantity of contents declarations on aerosols, which is found in the Fair Packaging and Labeling Act (FPLA) Manual Guide FDA 7563.7. This Guide states that in the past FDA has not objected to the use of units of volume to declare the net contents of aerosol preparations that would be liquid if not combined with the propellant and a net weight statement in avoirdupois units for products that would be solids if not combined with a propellant. FDA was asked to modify its position to provide that existing State regulations (concerning aerosol quantity of contents declarations) are not superseded by FDA Guidelines. FDA officials stated that FDA would consider the request, but it did not appear at the time of the Interim Meetings that FDA would make any statement to modify its position without following its administrative procedures and permitting interested parties to exhaust every element of due process.

One industry representative stated that there has been a good deal of concern that fluorocarbon propellants may in the long run cause the partial destruction of the ozone layer in the upper atmosphere surrounding the earth, and that the diminution of the ozone layer would have adverse effects on human health. Therefore, they have converted to new formulations which eliminate fluorocarbon propellants. As a result of this conversion to a nonfluorocarbon propellant system, which uses a propellant with a much lower density than that of the usual fluorocarbon propellants, continued use of a weight measure would be highly misleading to the consumer.

Therefore, some spray labels have been changed so as to denote the contents in terms of fluid measure, rather than in terms of weight measure.

They stated that if manufacturers were to be required to use weight measure, consumers would be deceived into buying products, such as hair spray, with a large amount of fluorocarbon, which vaporizes before it reaches the hair, rather than products with a large amount of base, which is what the consumer wants. They further indicated that they wished to avoid a confrontation with the States over this issue and believe that the matter can readily be resolved without the need for litigation. Although the use of fluid measure on the principal panel will give consumers the most helpful information at the point of purchase, the industry would have no objection to putting the net weight on the back of the label.

The Committee wishes to commend FDA for their interest in this matter and the manufacturers who seek to improve their product and its labeling information. The Committee is also encouraged to work with all interested parties to resolve this issue. However, the Committee does not believe that mere guidelines can preempt a Uniform Regulation developed under the technical authority of the

Federal agency delegated that authority by Congress and adopted by the States through its representatives, no matter how broad the preemptive clause of an act might be. Additionally, the committee cannot countenance open and notorious violations of State regulations where those violations occurred prior to bringing the issue before the Conference.

Therefore, the Committee believes that NCWM should support a firm stand by the States that their regulations must be respected.

#### 2.2.7. Aerosol Packaged Products

(Liaison, 1979, p. 239)

See also Guideline 2.2.6.

#### **Policy**

The NCWM recommends all aerosol packages be labeled by net weight. FDA permits volume declarations. The NCWM has requested FDA to change its regulations and revise its interpretation of these regulations.

#### **Substance of Petition**

The NCWM petitions the FDA to make the necessary changes to their regulations and interpretation of 21CFR 101.105(g) as appearing in the FDA Fair Packaging and Labeling Manual Guide, 7563.7 pertaining to the quantity of contents declaration on aerosol packaged products. It is requested that the net quantity statement on aerosol packaged products or similar pressurized packages be made in terms of net weight only. The reasons for recommending such changes are as follows:

- Net quantity labeling of aerosol packaged products in terms of net weight is a firmly established trade practice for such products.
- Net quantity labeling of aerosol packaged products in terms of volume is difficult (if not impossible) to verify with consumer verification methods or by conventional package inspection methods. State or local enforcement action is discouraged by such labeling.
- 3. Since the labeling of aerosol packaged products by volume cannot be compared with the labeling of such products in terms of net weight, labeling in terms of volume and weight inhibits value comparisons and causes consumer confusion with respect to the quantity of product the consumer is buying; in effect, it can be a form of deceptive labeling.
- 4. Uniformity between all State and Federal regulations is highly desirable both from the

standpoint of enforcement and for purposes of fair competition in the marketplace. The Uniform Packaging and Labeling Regulation and the Federal Trade Commission and Environmental Protection Agency Regulations require net quantity labeling of aerosol packaged products in terms of net weight.

## **2.2.8.** Variety and Combination Packages (L&R, 1982, p. 149)

See also Guideline 2.2.1.

#### **Interpretation**

- a. Seasonal gift packages are "variety packages" within the meaning of the Uniform Packaging and Labeling Regulation if they contain "reasonably similar commodities" (such as various fruits). They are "combination packages" if they contain "dissimilar commodities" (such as wine, fresh fruit, and jellies). Variety package labels must declare the total quantity in the package. Combination package labels must declare a quantity declaration for each portion of dissimilar commodities.
- b. The example provided with § 10.6., Variety Packages, of the Uniform Packaging and Labeling Regulation, shows a total quantity declaration and individual declaration for each type of commodity. The individual declaration is not required but is encouraged.

#### **Background**

The Committee reviewed § 10.5 and § 10.6 of the Model Packaging and Labeling Regulation in order to determine the need for further clarification. Several questions have arisen over the years with respect to:

- (1) What are the net contents labeling requirements for seasonal gift packages composed of varying types of commodities or goods all combined into one package?
- (2) Is the example provided in § 10.6. entirely in keeping with the declaration requirements? (This section requires that total net contents be declared, but the example shows both total and individual net contents.)

It is the opinion of the Committee that there is no need to modify these sections, but the discussions below may serve as guidance to enforcement officials and packagers on these sections.

As to the question of labeling requirements for seasonal gift packages, it must first be determined what the individual units comprising each package are. The following examples are possibilities:

- (a) individual packages of sausage, individual packages of cheese:
- (b) several kinds of fruit of different weights;
- (c) several kinds of fruit, bottle of wine, several packages of cheese.

Examples (a) and (c) above are combination packages and should be labeled with net quantities of each unit or type of unit. It is possible to combine fruit net weight (or count if appropriate) as one declaration, cheese net weight as a second, etc.

Example (b) above is a variety package and must be labeled with the total net weight or count (as appropriate) of fruit in the package. It is also reasonable for packagers to include, for full consumer information, a declaration of the individual net contents of each type of package or item in the gift package, although this latter declaration is not required (e.g., 1 lb bananas, 3 pears, etc.). This is also the key to the second question asked above concerning the example provided in § 10.6.; that is, although a declaration of individual item net contents is not required, packagers are encouraged to provide additional information wherever useful to the consumer.

#### 2.2.9. Textile Products

(L&R, 1977, p. 215)

#### Interpretation

- (a) When a range of widths (e.g., 58/60) appears on the label of bolts or rolls for yard goods, enforcement action should be taken whenever the action width falls below the lesser of the two widths given as the range (in the example above, when the fabric width is less than 58 in).
- (b) Section 10.9.3. Textiles: Variations from Declared Dimensions of the Uniform Packaging and Labeling Regulation is not to be interpreted as providing tolerances. The average requirement must be met. The average quantity of contents of a lot, shipment, or delivery must equal or exceed the declared dimensions. Dimensions of individual packages of textiles may vary as much as § 10.9.3. permits, but the average requirement must still be met.

### Background

The State of California and the American Textile Manufacturers Institute asked the NCWM Laws and Regulations Committee and the National Bureau of Standards to assist in the resolution of two textile-product issues. In the first issue California asks for help in correcting a short measure condition, apparently a nationwide problem, which has been found in the packaging and labeling of textile yard goods put up on bolts or rolls.

The problem is outlined as follows:

- 1. Approximate width measurements are being used by some manufacturers in their label declarations. For example, "58/60 inch" width.
- 2. Label declarations are false and misleading in that actual amounts are less than the quantity represented on the label.
- 3. Section 10.9.3. of the Uniform Packaging and Labeling Regulation is extremely vague as to its intent and true meaning. Are the substantial variations (3 and 6 percent); (6 and 12 percent) permitted as product tolerances, or are they maximum unreasonable minus and plus errors to be allowed when sampling the product for quantity when using Handbook 67.

California favors the repeal or clarification of § 10.9.3. and suggests amending § 10.9.2.(k) to read:

The quantity statement for packages of textile yard goods packaged in the bolt or roll for either wholesale or retail shall state its net measure in terms of yards for the length and width of the item, or its net weight in terms of avoirdupois pounds or ounces, or in terms of their metric equivalent.

During the Interim Meetings, a representative of the American Textile Manufacturers Institute (ATMI) informed committee members that the proposal to identify the width of yard goods with a single measurement (as opposed to a range) would be given serious consideration by their members, after which a recommendation will be finalized and submitted to the Laws and Regulations Committee.

After the Interim Meetings, the National Home Sewing Association said that if a single width declaration is required, the following could result:

- (a) No change in manufacturing process would be effectuated; only the size declaration on bolts would be changed.
- (b) Short measure problems could be created because consumers would look for the fabric to be exactly the stated width and, since the manufacturing processes were not changed, the width is in actuality the same as it was with the range declaration.
- (c) Increased cost to manufacturers would result. One loom is used for many different fibers now; a single width declaration could create a need for many looms for each of the different fibers, thereby imposing "pass-along" costs to consumers.
- (d) Consumer deception would be fostered in that a single declaration implies actual measurement.

California officials state that roll or bolt fabric should be labeled accurately with a single declaration. Additionally, they believe that industry does have enough shrinkage data on fibers used in the manufacturing processes, and thus could provide accurate measurement declaration on finished fabrics or materials.

The Committee believes that accurate quantity information should be provided on consumer products; however, no labeling changes should be required until patterns and yard goods are marketed in metric units. At that time, all measures shall be singularly stated (eliminating dual numbers) and, until that time, any products where size declaration is a range and found to be less than the smaller of the range declaration shall be subject to enforcement action. For example, a product marked "58-60 in" and found to be less than 58 inches should be considered to be in violation of weights and measures laws and/or regulations.

Additionally, the Committee hereby affirms that the intent of the Variations from Declared Dimensions permitted in § 10.9.3. in no way eliminates the requirement that quantity declarations for textiles must, on the average, not be less than declared declarations.

#### 2.2.10. Yarn

(L&R, 1983, p. 153)

#### Interpretation

The appropriate net contents declaration for yarn is weight.

#### Background

A consumer has requested that the net quantity statement for yarn be changed from weight to length. The proposal is based on her use of the product and her experience that darker colors often weigh more per unit of length. Therefore, she has found that a lighter color yarn will "go farther" in her craft application than a darker yarn; she complains that she cannot predict how much yarn of varying colors to purchase based on a weight declaration. The Committee is sympathetic to the request but must support existing labeling requirements for several reasons.

Yarn is by nature extremely stretchy; in order to label yarn by length, a specified tension would have to be applied in order to make any repeatable length measurement. Such a tension would have to be agreed upon by all the manufacturers of yarn, and would have to be applied in any compliance testing of product by weights and measures officials. Even if this tension "standard" were negotiated and decided upon, it would have little real meaning in use by needlecrafters, knitters, and others. The tension applied to yarn in use varies from user to user and from application to application; therefore, the length also varies. Not only does dyeing yarn change the weight, dyeing also changes

the length of yarn. For these reasons, industry representatives also support the requirements as they presently are written in the Uniform Packaging and Labeling Regulation.

The Committee recognizes the difficulty of working with this product and suggests that users of yarn consider buying an excess of the yarn over what is expected to be used in any application, and find out before purchase if, after finishing the product, they can return the unopened skeins to the retailers from whom the skeins were purchased.

#### 2.2.11. Tint Base Paint

(L&R, 1986, p. 146)

Section 11.23. of the Uniform Packaging and Labeling Regulation currently permits tint base paints (paints to which colorant must be added prior to sale) to be labeled in terms of the volume (a quart or gallon) that will be delivered to the purchaser after addition of the colorant <u>only</u> if three conditions are met:

- 1. "the system employed ensures that the purchaser always obtains a quart or a gallon,"
- 2. "a statement indicating that the tint base paint is not to be sold without the addition of colorant is presented on the principal display panel,"
- 3. "the contents of the container, before the addition of colorant, is stated in fluid ounces elsewhere on the label."

# 2.2.12. Reference Temperature for Refrigerated Products: When a Product Is Required to be Maintained under Refrigeration

(L&R, 1990, p. 86)

#### **Background**

Section 6.5.(b) was revised to clarify that the reference temperature of 40 °F applies only to products that must be refrigerated in order to maintain product quality, rather than to items, such as carbonated soft drinks, that are refrigerated for the convenience of the purchaser.

#### Guideline

The Committee also discussed how an inspector could decide whether a product under refrigeration is required to be maintained under refrigeration. The following guidelines are provided:

1. The traditional food items that normally require refrigeration and are found in refrigerated cases will not ordinarily have any statement about requiring refrigeration. These items include milk, orange juice, and similar products. They may be tested at any temperature at, above or below their reference temperature of 40 °F (4 °C) because such products are at their maximum density at their

reference temperature, and the volume of such products will always increase at higher or lower temperatures. Thus any errors made by not measuring at the exact reference temperature will be in the favor of the packer.

- 2. Food items that normally require refrigeration, but which are processed so as not to require refrigeration prior to opening, will have "refrigerate after opening" or similar wording on the label. Such items as milk and orange juice can be found in this category as well as in the "refrigeration required" category. The two categories can be distinguished by the "refrigerate after opening" statement, which calls for testing at or above their reference temperature of 68  $^{\circ}$ F (20  $^{\circ}$ C).
- 3. Food items that are not expected to require refrigeration, but which may be refrigerated for the convenience of the consumer (such as carbonated beverages), are to be tested at temperatures of 68 °F (20 °C) or above even when found refrigerated for the convenience of the consumer.

# 2.2.13. 3. Declaration of Identity: Consumer Package (UPLR) and 1.5.1. In Combination with Other Foods (UMSCR)

(L&R, 1990, p. 93)

#### **Background**

Many food products are made by the retail store and labeled with names that may or may not have standards of identity or standards of composition in Federal regulation or policy (for example, "chicken cordon bleu"). Weights and measures officials need to know which names have standards of identity that must be followed in formulating the product and, therefore, in providing the ingredient statement.

### **Meat and Poultry Products**

A Consumer Guide to Content and Labeling Requirements (Home and Garden Bulletin No. 236)

#### **Food Standards**

The U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) and the U.S. Department of Health and Human Services' Food and Drug Administration (FDA) share the responsibility of assuring truthful and accurate information on product labels. FSIS has authority over all products containing more than 3 percent fresh meat or at least 2 percent cooked poultry meat. FDA oversees the labeling of most other food products.

Both agencies use a system of "food standards." These standards set requirements on the kinds and amounts of ingredients used in the manufacture of processed foods. Basically, these standards assure consumers that, if a product goes by a particular name, it will have certain characteristics.

#### **USDA** Standards of Identity and Composition

Almost all standards enforced by FSIS are called "standards of composition." These standards identify the minimum amount of meat or poultry required in a product's recipe. For example, the standard of composition for "chicken a la king" states that, if a product carries this name on its label, at least 20 percent cooked poultry meat must be used in the recipe.

But standards of composition don't prevent a manufacturer from increasing the meat or poultry content or adding other ingredients, to increase a product's appeal. For instance, a processor has the option of using more than the required amount of chicken in chicken a la king and adding other ingredients to make the product unique.

"Standards of identity," on the other hand, set specific requirements for a food's makeup: the kind and minimum amount of meat or poultry; maximum amount of fat or moisture; and any other ingredients allowed. Corned beef hash and chopped ham are two FSIS-regulated products that have standards of identity.

#### **Label Approval**

Before a product may be marketed, its label must be examined and approved by FSIS staff specialists. Food manufacturers submit over 100 000 labels a year for agency review. Label approval applications must include the product name, formula, method of preparation, type of container, and how the label is to be used.

A number of labeling regulations apply across-the-board to all meat and poultry products. These include: appropriate product name; ingredients, listed from most to least, by weight in the product recipe; net quantity of the package contents; name and address of the manufacturer, packer, or distributor; the USDA mark of inspection; and any special care or handling instructions, such as "keep refrigerated." In addition, label photographs or artwork depicting a product must not be misleading.

To assure consumers that the names of meat and poultry products accurately reflect the contents of these products, label reviewers evaluate product formulas and methods of preparation by comparing them with official standards in the meat and poultry inspection regulations. Because unpublished standards are used to evaluate some products, FSIS labeling policies also provide guidance.

Sometimes, no standard exists for a certain product. In these cases, a manufacturer can either give the product a "descriptive" name, such as "Chopped and Formed Cured Pork Product," or use a "fanciful" name accompanied by a descriptive name-"Breakfast Strips: Chopped and Formed Cured Pork Product." A manufacturer may also submit a proposal to FSIS, requesting a standard for the product.

## Why You Should Know About Content and Labeling Requirements

Although Federal labeling laws and regulations are established to protect the public, consumers are sometimes unaware of how to use the information on product labels. FSIS content and labeling requirements provide a simple means by which consumers can learn what to expect from a product if it is labeled with a particular name.

If you know that product names are required to truthfully reflect product content, much can be learned just by noting the order in which major ingredients appear. For example, the name "Beef with Gravy" tells you that there is more beef in that product than in one called "Gravy with Beef."

This guide includes listings for over 250 popular meat and poultry products-from baby food to won ton soup.

For your convenience, the list of meat and poultry product content and labeling requirements is divided into two sections-"Meat Products" and "Poultry Products." Some product definitions include terms that are further defined elsewhere in the guide. For example, the "meatballs" in "spaghetti and meatballs" (page 187) is defined on page 186. The term "byproducts" is explained on pages 189, 190 in the Definitions section.

#### **Meat Products**

All percentages of meat are on the basis of fresh uncooked weight unless otherwise indicated. Keep in mind the meat may shrink in weight after cooking because fat and water cook away.

#### **Baby Food**

High Meat Dinner-At least 26 percent meat. Meat and Broth-At least 61 percent meat. Vegetable with Meat-At least 8 percent meat.

**Bacon** (Cooked)-Weight of cooked bacon is 40 percent of uncooked, cured, smoked bacon.

**Bacon and Tomato Spread**-At least 20 percent cooked bacon.

**Bacon Dressing**-At least 8 percent cured, smoked bacon.

**Barbecue Sauce with Meat**-At least 35 percent meat (cooked basis).

**Barbecued Meat-**Weight of meat when barbecued can't exceed 70 percent of the fresh uncooked meat. Must have barbecued (crusted) appearance and be prepared over burning or smoldering hardwood or its sawdust. If cooked by other drying means, product name must mention the method of cooking.

**Beans with Bacon or Ham in Sauce**-At least 12 percent bacon or ham (cooked basis).

**Beans with Frankfurters in Sauce**-At least 20 percent franks.

Beans with Meat in Sauce-At least 12 percent meat.

**Beans with Meatballs in Sauce**-At least 20 percent meatballs.

Beef a la King-At least 20 percent beef (cooked basis).

Beef a la Mode-At least 50 percent beef.

**Beef Almandine with Vegetables**-At least 18 percent beef (cooked basis). Product must contain almonds.

Beef and Dumplings with Gravy or Beef and Gravy with Dumplings-At least 25 percent beef.

**Beef Burgundy**-At least 50 percent beef; enough wine to characterize the sauce.

**Beef Carbonade**-At least 50 percent beef.

Beef Roulade-At least 50 percent beef (cooked basis).

**Beef Sausage** (raw)-No more than 30 percent fat. No byproducts, no extenders and no more than 3 percent water.

**Beef Stroganoff**-At least 45 percent fresh, uncooked beef or 30 percent cooked beef and one of the following: at least 10 percent sour cream; or a combination of at least 7-1/2 percent sour cream and 5 percent wine; or 9-1/2 percent whole milk, 2 percent sour cream, and 2-1/2 percent wine.

**Beef with Barbecue Sauce**-At least 50 percent beef (cooked basis).

**Beef with Gravy**-At least 50 percent beef (cooked basis).

**Breaded Steaks, Chops, etc.**-Breading can't exceed 30 percent of finished product weight.

**Breakfast** (frozen product containing meat)-At least 15 percent cooked meat based on total net weight of breakfast.

**Breakfast Sausage**-No more than 50 percent fat. May contain 3 ½ percent binders and extenders, and 3 percent water.

**Brown and Serve Sausage**-No more than 35 percent fat and no more than 10 percent added water.

**Brunswick Stew**-At least 25 percent meat, made up of at least two kinds of meat, including poultry meat. Must contain corn as one of the vegetables.

**Burgundy Sauce with Beef and Noodles**-At least 25 percent beef (cooked basis) and up to 20 percent noodles; enough wine to characterize the sauce.

Burrito-At least 15 percent meat.

Cabbage Rolls with Meat in Sauce-At least 12 percent meat.

Cannelloni with Meat and Sauce-At least 10 percent meat.

Cappelletti with Meat in Sauce-At least 12 percent meat.

**Cheesefurter-**Shall contain sufficient cheese to characterize the product.

Chili con Carne-At least 40 percent meat.

Chili con Carne with Beans-At least 25 percent meat.

Chili Hot Dog with Meat-At least 40 percent meat.

Chili Mac-At least 16 percent meat. Must be qualified with true product name: "Beans, Macaroni, and Beef in Sauce."

Chili Sauce with Meat-At least 6 percent meat.

**Chop Suey (American Style) with Macaroni and Meat**-At least 25 percent meat.

Chop Suey Vegetables with Meat-At least 12 percent meat.

**Chopped Ham-**Must be prepared from fresh, cured, or smoked ham, plus certain kinds of curing agents and seasonings. May contain dehydrated onions, dehydrated garlic, corn syrup, and not more than 3 percent water to dissolve the curing agents.

Chow Mein Vegetables with Meat-At least 12 percent meat.

**Chow Mein Vegetables with Meat and Noodles**-At least 8 percent meat and the noodles must equal no more than 1/3 of the product.

**Corn Dog**-Must be accompanied by true product name, "Batter Wrapped Franks on a Stick." Limited to 65 percent batter and a minimum of 35 percent frankfurter.

**Corned Beef and Cabbage**-At least 25 percent corned beef (cooked basis).

**Corned Beef Hash**-At least 35 percent beef (cooked basis). Must contain potatoes, curing agents, and seasonings. May contain onions, garlic, beef broth, beef fat, or others. No more than 15 percent fat; no more than 72 percent moisture.

**Country Ham**-A dry-cured product frequently coated with spices. Minimum 4 percent salt content.

Creamed Meat Products or Creamed Sauce with Meat Products (Chipped Beef, Cooked Beef, Cured Beef, Ham, Franks, Meatballs, etc.)-At least 18 percent meat product (cooked basis).

**Crepe with Meat**-Based on total net weight of product; at least 20 percent meat (cooked basis) if filling has no other major characterizing ingredient, or 10 percent meat (cooked basis) if one other major characterizing ingredient ("Crepe with Meat and Cheese," for example).

**Croquettes**-At least 35 percent meat (cooked basis); 50 percent fresh basis.

**Curried Sauce with Meat and Rice** (casserole)-At least 35 percent meat (cooked basis) in the sauce and meat part. No more than 50 percent cooked rice.

**Deviled Ham-**No more than 35 percent fat; no added moisture; no cereal.

**Dinner** (frozen product containing meat)-At least 25 percent meat or meat food product (cooked basis) figured on total meal minus appetizer, bread, and dessert. Consumer package must weigh at least 10 ounces (284 grams).

**Dumplings with Meat in Sauce**-At least 18 percent meat.

Egg Foo Yong with Meat-At least 12 percent meat.

**Egg Roll with Meat**-At least 10 percent meat.

Egg Roll with Meat and Seafood-At least 5 percent meat.

Eggs Benedict-At least 18 percent cured smoked ham.

Enchilada with Meat-At least 15 percent meat.

Entree: Meat or Meat Food Product and One Vegetable-At least 50 percent meat or meat food product (cooked basis).

**Frankfurter, Bologna, and Similar Cooked Sausage-**May contain only skeletal Meat. No more than 30 percent fat, 10 percent added water, and 2 percent corn syrup. No more than 15 percent poultry meat (exclusive of water in formula).

Frankfurter, Bologna, and Similar Cooked Sausage with Byproducts or Variety Meats-Same limitations as above on fat, added water, and corn syrup. Must contain at least 15 percent skeletal meat. These products must be specifically labeled, such as "Frankfurters with Byproducts," and each byproduct or variety meat must be specifically named in the list of ingredients. These include heart, tongue, spleen, tripe, and stomach.

Frankfurter, Bologna, and Similar Cooked Sausage with Byproducts or Variety Meats and which also Contain Nonmeat Binders-Product made with the above formulas and also containing up to 3-1/2 percent nonmeat binders (or 2 percent isolated soy protein). These products must be distinctively labeled, such as, "Frankfurters with Byproducts, Nonfat Dry Milk Added," The binders my be named in their proper order in the list of ingredients.

Fried Rice with Meat-At least 10 percent meat.

**Fritter**-At least 35 percent meat; no more than 65 percent breading.

**German Style Potato Salad with Bacon**-At least 14 percent bacon (cooked basis).

Goulash-At least 25 percent meat.

**Gravy**-At least 25 percent meat stock or broth, or at least 6 percent meat.

**Gravy and Sauerbraten**-35 percent meat (cooked basis).

**Gravy and Swiss Steak**-At least 35 percent meat (cooked basis).

**Gravy and Yankee Pot Roast**-At least 35 percent meat (cooked basis).

**Gravy with Beef**-At least 35 percent beef (cooked basis).

**Ham** (canned)-Limited to 8 percent total weight gain after processing.

Ham, Cooked or Cooked and Smoked (not canned)-Must not weigh more after processing than the fresh ham weights before curing and smoking; if contains up to 10 percent added weight, must be labeled, "Ham, Water Added."

Ham a la King-At least 20 percent ham (cooked basis).

**Ham and Cheese Spread**-At least 25 percent ham (cooked basis).

**Ham Chowder** 

Ready-to-Eat-At least 5 percent ham (cooked basis) Condensed-At least 10 percent ham (cooked basis).

**Ham Salad**-At least 35 percent ham (cooked basis).

Ham Spread-At least 50 percent ham.

Hamburger, Hamburg, Burger, Ground Beef, or Chopped Beef-No more than 30 percent fat; no extenders.

**Hash**-At least 35 percent meat (cooked basis).

**Hors d'oeuvre**-At least 15 percent meat (cooked basis) or 10 percent bacon (cooked basis).

**Jambalaya with Meat**-At least 25 percent meat (cooked basis).

**Knish**-At least 15 percent meat (cooked basis).

**Kreplach**-At least 20 percent meat.

Lasagna with Meat and Sauce, or Cheese Lasagna with Meat-At least 12 percent meat.

Lasagna with Meat Sauce-At least 6 percent meat.

**Lasagna with Sauce, Cheese, and Dry Sausage**-At least 8 percent dry sausage.

**Lima Beans with Ham or Bacon in Sauce**-At least 12 percent ham or bacon (cooked basis).

Liver Products, such as Liver Loaf, Liver Paste, Liver Pate, Liver Cheese, Liver Spread, Liverwurst, Braunschweiger, and liver Sausage-At least 30 percent liver.

Macaroni and Beef in Sauce-At least 12 percent beef.

**Macaroni and Cheese with Ham**-At least 12 percent ham (cooked basis).

Macaroni and Meat-At least 25 percent meat.

**Macaroni Salad with Ham or Beef**-At least 12 percent meat (cooked basis).

**Manicotti with Meat in Sauce** (contains a meat filling)-At least 10 percent meat.

Margarine or Oleomargarine-If product is entirely of animal fat or contains some animal fat, it is processed under Federal inspection. Must contain-individually or in combination-pasteurized cream, cow's milk, skim milk, combination of nonfat dry milk and water or finely ground

soybeans and water. May contain butter, salt, artificial colorings, vitamins A and D, and permitted functional substances. Finished product must contain at least 80 percent fat from animal or vegetable sources. Label must clearly state which types of fat are used.

Meat and Dumplings in Sauce-At least 25 percent meat.

Meat and Vegetables-At least 50 percent meat.

**Meat Casserole**-At least 25 percent fresh, uncooked meat or 18 percent cooked meat.

Meat Curry-At least 50 percent meat.

**Meat Loaf** (baked or oven-ready)-At least 65 percent meat and no more than 12 percent cereal products.

Meat Pasty-At least 25 percent meat.

Meat Pie or Vegetable Meat Pie-At least 25 percent meat.

Meat Ravioli-At least 10 percent meat in ravioli.

**Meat Ravioli in Sauce**-At least 10 percent meat in ravioli; at least 50 percent ravioli in total product.

**Meat Salad**-At least 35 percent meat (cooked basis).

Meat Sauce-At least 6 percent meat.

#### **Meat Soup**

Ready-to-Eat-At least 5 percent meat. Condensed-At least 10 percent meat.

Meat Spread-At least 50 percent meat.

Meat Stew-At least 25 percent meat.

Meat Taco-At least 15 percent meat.

Meat Taco Filling-At least 40 percent meat.

**Meat Turnover**-At least 25 percent meat.

**Meat Wellington-**At least 50 percent cooked tenderloin spread with liver pate or similar coating and covered with not more than 30 percent pastry.

**Meatballs**-No more than 12 percent extenders, including textured vegetable protein. At least 65 percent meat.

**Meatballs in Sauce**-At least 50 percent meatballs (cooked basis).

**Meatball Stroganoff**-At least 45 percent meatballs (cooked basis).

Mince Meat-At least 12 percent meat.

**Mousaka**-At least 25 percent meat. Must be qualified on label as "Eggplant and Meat Casserole."

**New England Boiled Dinner**-At least 25 percent cooked corned beef.

**Omelet with Bacon**-At least 9 percent bacon (cooked basis).

Omelet with Dry Sausage-At least 12 percent dry sausage.

Omelet with Ham-At least 18 percent ham (cooked basis).

Omelet with Meat Food Product, such as Creamed Chipped Beef or Corned Beef Hash-At least 25 percent meat food product.

**Omelet, Western**-At least 18 percent cooked ham. Contains onions and green and/or red bell peppers.

Pate de Foie-At least 30 percent liver.

**Pepper Steak** (Chinese)-At least 30 percent thin, braised strips of beef (cooked basis).

**Peppers and Italian Sausage in Sauce**-At least 20 percent sausage (cooked basis).

Pizza with Meat-At least 15 percent meat.

**Pizza with Sausage**-At least 12 percent sausage (cooked basis) or 10 percent dry sausage, such as pepperoni.

**Pork Sausage**-No more than 50 percent fat or 3 percent water; may contain no byproducts or extenders.

**Pork with Barbecue Sauce**-At least 50 percent port (cooked basis).

**Pork with Dressing**-At least 50 percent pork (cooked basis).

**Pork with Dressing and Gravy**-At least 30 percent pork (cooked basis).

**Proscuitto**-A flat, dry-cured ham coated with spices.

**Quiche Lorraine**-At least 8 percent bacon or ham (cooked basis) and 10 percent swiss or gruyere cheese.

**Rice with Meat**-At least 12 percent meat.

**Salisbury Steak**-At least 65 percent meat and no more than 12 percent extenders, including textured vegetable protein.

**Sandwich Meat**-At least 35 percent meat in total sandwich; bread component may not exceed 50 percent of the sandwich.

**Sauerbraten**-At least 50 percent beef (cooked basis).

**Sauerkraut Balls with Meat**-At least 30 percent meat.

Sauerkraut with Wieners and Juice-At least 20 percent wieners.

**Sausage with Sauerkraut in Sauce**-At least 40 percent sausage (cooked basis).

**Scalloped Potatoes and Ham or Sausage**-At least 20 percent ham or sausage (cooked basis).

**Scallopini** ("Veal Scallopini," for example)-At least 35 percent meat (cooked basis).

**Scrambled Eggs with Ham in a Pancake**-At least 9 percent ham (cooked basis).

**Scrapple**-At least 40 percent meat and/or meat byproducts.

**Shepherd's Pie**-At least 25 percent meat; no more than 50 percent mashed potatoes.

**Sloppy Joe**-At least 35 percent meat (cooked basis). Must be qualified with true product name, "Barbecue Sauce with Beef."

**Snack**-At least 15 percent meat (cooked basis) or 10 percent bacon (cooked basis).

Spaghetti Sauce with Meat-At least 6 percent meat.

**Spaghetti with Meat or Meatballs in Sauce**-At least 12 percent meat.

**Spanish Rice with Meat**-At least 20 percent meat (cooked basis).

**Stuffed Cabbage with Meat in Sauce**-At least 12 percent meat.

**Stuffed Pepper with Meat in Sauce**-At least 12 percent meat.

Sukiyaki-At least 30 percent meat.

**Sweet and Sour Meat**-At least 25 percent meat and at least 16 percent fruit.

**Swiss Steak with Gravy**-At least 50 percent meat (cooked basis).

Tamale-At least 25 percent meat.

**Tamale with Sauce or Gravy**-At least 20 percent meat.

**Tamale Pie**-At least 20 percent meat; filling must be at least 40 percent of total product.

**Taquito**-At least 15 percent meat.

**Tongue Spread**-At least 50 percent tongue.

Tortellini with Meat-At least 10 percent meat.

**Tortellini with Meat in Sauce**-At least 50 percent cooked meat tortellini.

**Veal and Peppers in Sauce**-At least 30 percent meat (cooked basis).

**Veal Bird**-At least 60 percent meat and no more than 40 percent stuffing.

**Veal Cordon Bleu**-At least 60 percent veal, 5 percent ham, and containing swiss, gruyere, mozzarella, or pasteurized process swiss cheese.

Veal Fricassee-At least 40 percent meat.

Veal Parmigiana-At least 40 percent breaded veal in sauce.

**Veal Scallopini**-At least 35 percent veal (cooked basis).

**Veal Steak**-Chopped, shaped, cubed, frozen. Beef can be added up to 20 percent with product name shown as, "Veal Steaks, Beef Added, Chopped, Shaped, and Cubed." If more than 20 percent beef, must be labeled, "Veal and Beef Steak, Chopped, Shaped, and Cubed." No more than 30 percent fat in total product.

Vegetable and Meat Casserole-At least 25 percent meat.

Vegetable and Meat Pie-At least 25 percent meat.

Won Ton Soup-At least 5 percent meat.

#### **Poultry Products**

All percentages of poultry are on cooked, deboned basis unless otherwise indicated. When standard indicates

poultry meat, skin, and fat, the skin and fat are in proportions normal to poultry.

#### **Baby Food**

High Poultry Dinner-At least 18-3/4 percent poultry meat, skin, fat, and giblets.

Poultry with Broth-At least 43 percent poultry meat, skin, fat, and giblets.

Beans and Rice with Poultry-At least 6 percent poultry meat

**Breaded Poultry**-No more than 30 percent breading.

#### **Canned Boned Poultry**

Boned (kind) Solid Pack-At least 95 percent poultry meat, skin, and fat.

Boned (kind)-At least 90 percent poultry meat, skin, and fat. Boned (kind), with Broth-At least 80 percent poultry meat, skin, and fat.

Boned (kind), with Specified Percentage of Broth-At least 50 percent poultry meat, skin, and fat.

Cannelloni-At least 7 percent poultry meat.

**Chicken Cordon Bleu**-At least 60 percent boneless chicken breast (raw basis), 5 percent ham, and either swiss, gruyere, or mozzarella cheese. (If breaded, no more than 30 percent breading.)

**Creamed Poultry**-At least 20 percent poultry meat. Product must contain some cream.

Egg Roll with Poultry-At least 2 percent poultry meat.

**Eggplant Parmigiana with Poultry**-At least 8 percent poultry meat.

**Entree: Poultry or Poultry Food Products and One Vegetable**-At least 37-1/2 percent poultry meat or poultry food product.

**Gravy with Poultry**-At least 15 percent poultry meat.

**Noodles or Dumplings with Poultry**-At least 6 percent poultry meat.

**Poultry a la Kiev**-Must be breast meat (may have attached skin) stuffed with butter and chives.

**Poultry a la King**-At least 20 percent poultry meat.

**Poultry Almandine**-At least 50 percent poultry meat. Product must contain almonds.

**Poultry Brunswick Stew**-At least 12 percent poultry meat. Must contain corn.

**Poultry Burgers**-100 percent poultry, with skin and fat not in excess of natural proportions.

**Poultry Burgundy**-At least 50 percent poultry meat; enough wine to characterize the product.

**Poultry Burrito**-At least 10 percent poultry meat.

**Poultry Cacciatore**-At least 20 percent poultry meat, or 40 percent with bone.

**Poultry Casserole**-At least 18 percent poultry meat.

**Poultry Chili**-At least 28 percent poultry meat.

**Poultry Chili with Beans**-At least 17 percent poultry meat.

**Poultry Chili with Beans**-At least 17 percent poultry meat.

**Poultry Chop Suey**-At least 4 percent poultry meat.

**Poultry Chow Mein** (without noodles)-At least 4 percent poultry meat.

**Poultry Creole with Rice**-At least 35 percent cooked meat in poultry and sauce portion. Not more than 50 percent rice in total product.

**Poultry Croquette**-At least 25 percent poultry meat.

**Poultry Croquette with Macaroni and Cheese**-At least 29 percent croquettes.

**Poultry Dinner** (a frozen product)-At least 18 percent poultry meat, figured on total meal menu minus appetizer, bread, and dessert.

**Poultry Empanadillo** (a poultry turnover)-At least 25 percent poultry meat.

**Poultry Fricassee**-At least 20 percent poultry meat.

**Poultry Fricassee of Wings**-At least 40 percent poultry wings (cooked basis, with bone).

**Poultry Hash**-At least 30 percent poultry meat.

**Poultry Lasagna**-At least 8 percent poultry meat (raw basis).

**Poultry Livers with Rice and Gravy**-At least 30 percent livers in poultry and gravy portion, or 17-1/2 in total product.

**Poultry Meat Loaf**-A minimum of 65 percent raw poultry or 50 percent poultry meat, and a maximum of 12 percent extenders.

**Poultry Paella**-At least 35 percent poultry meat or 35 percent poultry meat and other meat (cooked basis); no more than 35 percent cooked rice. Must contain seafood.

**Poultry Parmigiana**-At least 40 percent breaded poultry.

Poultry Pie-At least 14 percent poultry meat.

**Poultry Ravioli**-At least 2 percent poultry meat.

**Poultry Roll**-No more than 3 percent binding agents, such as gelatin, in the cooked product; no more than 2 percent natural cooked-out juices.

**Poultry Roll with Broth**-Contains more than 2 percent poultry broth in addition to natural cooked-out juices.

**Poultry Roll with Gelatin**-Gelatin exceeds 3 percent of cooked product.

**Poultry Roll with Natural Juices**-Contains more than 2 percent in natural cooked-out juices.

**Poultry Salad**-At least 25 percent poultry meat (with normal amounts of skin and fat).

Poultry Scallopini-At least 35 percent poultry meat.

#### **Poultry Soup**

Ready-to-Eat-At least 2 percent poultry meat. Condensed-At least 4 percent poultry meat.

Poultry Stew-At least 12 percent poultry meat.

**Poultry Stroganoff**-At least 30 percent poultry meat and at least 10 percent sour cream or a "gourmet" combination of at least 7 ½ percent sour cream and 5 percent wine.

**Poultry Tamale**-At least 6 percent poultry meat.

**Poultry Tetrazzini**-At least 15 percent poultry meat.

**Poultry Turnover**-At least 14 percent poultry meat.

**Poultry Wellington**-At least 50 percent boneless poultry breast spread with a liver or similar pate coating and covered in not more than 30 percent pastry.

**Poultry with Gravy**-At least 35 percent poultry meat.

**Poultry with Gravy and Dressing-**At least 25 percent poultry meat.

**Poultry with Noodles au Gratin**-At least 18 percent poultry meat.

**Poultry with Noodles or Dumplings**-At least 15 percent poultry meat, or 30 percent with bone.

**Poultry with Rice**-At least 15 percent poultry meat.

**Poultry with Vegetables**-At least 15 percent poultry meat.

**Sauce with Poultry or Poultry Sauce**-At least 6 percent poultry meat.

**Stuffed Cabbage with Poultry**-At least 8 percent poultry meat.

**Stuffed Peppers with Poultry**-At least 8 percent poultry meat.

**Turkey Ham-**A product made with cured turkey thigh meat only.

#### **Definitions**

Some terms used throughout this document are defined below:

**Binders**, **Extenders**-Binders and extenders help to hold a meat or poultry product together, and also aid in retaining product moisture. Sometimes, these ingredients are used to supplement the required minimum amount of meat or poultry present in a product.

Cure-Curing ingredients are used to preserve such products as ham, frankfurters, and bacon. They also give these products their characteristic taste and color. Today, almost all curing of meats is done by adding limited amounts of nitrite in combination with salt during processing. If nitritecured products are stored at the proper temperature, the presence of nitrite prevents the growth of organisms that cause botulism in humans.

Meat-Meat comes from the muscles of cattle, sheep, swine, and goats. "Skeletal" meat refers to the muscular cuts which were attached to the animal's bone structure. Muscle found in the tongue and heart is also defined as "meat," but is permitted only in some meat products. Regulations require that all meats be identified by species (type) of animal, and, if meat from the tongue or heart is used, it must be named in the list of ingredients.

**Meat Byproducts** (sometimes known as "variety meats")-These terms refer to the edible and wholesome parts of cattle, sheep, swine, and goats, other than skeletal meat. Whenever byproducts are added to meat products, each specific byproduct must be named in the list of ingredients.

**Meat Food Product** (also known as "meat product")-Any food suitable for human consumption made from cattle, sheep, swine, or goats, containing more than 3 percent meat.

**Poultry**-All domesticated birds (chickens, turkeys, ducks, geese, guineas).

**Poultry Byproducts**-All edible parts of poultry other than sex glands and "poultry meat."

**Poultry Food Product** (also known as "poultry product")-Any food suitable for human consumption made from any domesticated bird, containing more than 2 percent poultry meat.

**Poultry Meat**-This term refers to the white and dark meat portions of deboned poultry, excluding fat, skin, and other edible poultry parts.

Vegetable (Plant) Protein-Vegetable protein products derived from soybeans may be used as binders or extenders in such meat and poultry products as sausages, luncheon meats, soups, sauces, and gravies. Sometimes, they are the main ingredients in meat and poultry product substitutes. Soybeans are processed into three basic soy protein products: soy flour, soy protein concentrate, and isolated soy vegetable protein. Whenever soy protein is added to a meat or poultry product, its presence is noted in the ingredient statement on the label. In some instances, it is also included in the product name, e.g., "Beef and Textured Vegetable Protein Burritos."

# 2.2.14. Typewriter and Computer Printer Ribbons and Tapes

(L&R, 1991)

#### Interpretation

Typewriter and computer printer ribbons must be labeled by length. In addition, character yield information may be disclosed on the principal display panel.

#### Background

Packages of typewriter and computer printer ribbons and tapes have been found in the marketplace with no declaration of quantity of any kind. There is information on the package about the type of machine the ribbon or tape is designed to fit, but this is not a declaration of quantity. Purchasers have been misled as a result of the failure of

some manufacturers to disclose the length; ribbons designated for a particular machine may be sold at a low price, but with substantially less length than ribbons ordinarily produced for the machine.

#### 2.3.1. Instant Concentrated Products

(L&R, 1977, p. 219)

#### **Interpretation**

No additional net contents information (other than weight) is required for instant coffee, tea, and cocoa.

#### **Background**

It was proposed that certain products, such as instant coffee, tea, and cocoa, should have a dual statement of weight including the number of cups (e.g., makes 10 6-oz cups).

The National Coffee Association of U.S.A., Inc., offered the following comments:

- 1. The number of servings of instant coffee will depend upon the size of the cup involved and the taste of the individual consumer.
  - a. The size of a cup will vary widely, ranging from a small "demitasse" cup to a large coffee mug.
  - b. The taste of the individual consumer defies definition because it will vary as widely as the number of individuals considered. Market research shows many like it "strong and black" and others prefer it "mild and thin."
- 2. Any statement placed on a container of instant coffee that represents that the consumer will be able to obtain a specified number of servings would be arbitrary, confusing and, in a very sense, deceptive.
- 3. In view of the foregoing, any such requirements that the number of servings be listed on a container of instant coffee might expose the manufacturer to complaints from consumers that it was engaging in an unfair and deceptive practice.

Other issues that the Committee discussed included the authority to require precise directions (rather than, for example, 2 to 3 heaping teaspoons) and the issues of product variability and uniform enforcement.

#### 2.3.2. Fresh Fruits and Vegetables

(L&R, 1979, p. 176; 1980; 1982, p. 152)

#### Guideline

Recognizing the difficulty faced by consumers when more than one method of sale is employed in the same outlet for the same product, noncomparable methods of sale (e.g., weight and measure) for the same produce item in the same outlet should be minimized.

The methods	of	retail	sale	for	fresh	fruits	and	vegetables
should be:								

Commodity	Method of Sale
Apples	Weight or count, or by dry
	measure in units not less than
	1 peck
Apricots	Weight
Artichokes	Weight or count
Asparagus	Weight or bunch
Avocados	Count
Bananas	Weight
Beans	Weight or dry measure, in
	units not less than 1 peck
Beets	Weight or bunch
Berries (all)[NOTE 1, see page 192]	Weight or measure
Broccoli	Weight or bunch
Brussels sprouts	Weight
Cabbage	Weight
Cantaloupes	Weight or count
Carrots	Weight or bunch
Cauliflower	Weight or bunch
Celery	Weight or count
Cherries [NOTE 1, see page 192]	Weight or measure
Coconuts	Weight or count
Corn on cob	Count
Cranberries	Weight or measure
Cucumbers	Weight or count
Currants <sup>[NOTE 1, see page 192]</sup>	Weight or measure
Dates	Weight
Eggplant	Weight or count
Escarole	Weight or bunch
Figs	Weight
Garlic	Weight or count
Grapefruits	Weight or count
Grapes	Weight
Greens (all)	Weight
Kale	Weight
Kohlrabi	Weight
Leeks	Weight
Lemons	Weight or count
Lettuce	Weight or count
Limes	Weight or count
Mangoes	Weight or count
Melons (whole)	Weight or count
Melons (cut or pieces)	Weight
Mushrooms	Weight or measure
Nectarines	Weight or count
Okra Weight	
Onions (spring or green)	Weight or bunch
Onions (dry)	Weight
Oranges	Weight or count
Papaya	Weight or count
i upuyu	,, eight of coulit

Peaches	Weight or count, or by dry
	measure in units not less than
	1 peck
Pears	Weight or count, or by dry
	measure in units not less than
	1 peck
Peas	Weight
Peppers	Weight or count
Persimmons	Weight or count
Plums	Weight or dry measure, in
	units not less than 1 peck
Pineapples	Weight or count
Pomegranates	Weight or count
Potatoes (Irish or sweet)	Weight
Prunes	Weight
Pumpkins	Weight or count
Radishes	Weight
Rhubarb	Weight
Rutabagas	Weight
Spinach	Weight or bunch
Tangerines	Weight or count
Tomatoes	Weight or dry measure, in
	units not less than 1 peck
Tomatoes	Weight or measure
(cherry)[NOTE 1, see page 192]	-
Turnips	Weight or bunch

**NOTE 1:** Commodities sold by measure must be sold in containers standardized by the Berry Basket and Box Code in Handbook 44.

#### 2.3.3. Cardboard Cartons

(L&R, 1974, p. 223)

#### **Guidelines and Interpretations**

Cardboard cartons should be sold by their dimensions. Identification numbers used in the trade do not correspond to these dimensions, and could tend to mislead the uninformed purchaser (although there is no actual unit such as inches associated with the identification numbers). Sales or catalogue literature will have to be investigated to determine whether there is sufficient information upon which to make a purchasing decision.

#### **Background**

Copies of letters received by the New York Bureau of Weights and Measures regarding cardboard containers were forwarded to the Committee. These letters highlight the confusion that exists when these containers are sold to new businessmen by an identity number which is often mistaken for the size of the box. For example, a 30 x 4 identification number refers to a box whose actual size is 27 x 3 inches. It was suggested that a new section be added to the Method of Sale of Commodities Regulation so that these containers can be sold on a basis that will provide more accurate information.

Weight or bunch

Weight

Parsley

**Parsnips** 

An important argument in support of adding a new section is that small businessmen just getting started need as much assistance as can be provided in order to survive and grow.

An argument opposing this change is that a table, similar to table 1 of § 2.9. (Softwood Lumber) of the Uniform Method of Sale Regulation, could be printed showing the relationship between identity and size; this would not solve the problem.

It is the consensus of the Committee that these containers should be sold by actual size. The Committee does not believe, however, that every trade practice must be controlled through the Uniform Laws and Regulations. This is particularly true where the item does not directly concern the retail consumer. The Committee, therefore, recommends that the appropriate trade associations be contacted and asked to correct this practice on a voluntary basis.

#### 2.3.4. Catalyst Beads

(L&R, 1981, p. 100)

#### **Guideline and Interpretation**

The proper method of sale of catalyst beads used in automobile exhaust systems is by volume. It is appropriate for the quantity declaration to be supplemented by part number or other description of the specific converter for which the package of catalyst beads is intended.

#### **Background**

A communication from the General Motors Corporation AC Spark Plug Division was forwarded to the Committee which proposes discontinuing the labeling of their catalyst beads by weight. When the catalyst becomes contaminated by leaded gasoline or prolonged use, the catalytic converter in the exhaust system of recent GM cars and trucks (running on unleaded gasoline) must be emptied of its catalyst beads and be refilled by volume with replacement catalyst beads in order to meet emission standards. The beads are used by volume (to fill a catalytic converter), are hygroscopic, and vary in core material density. Therefore, packages of beads meeting a net weight label require an additional one-third pound (on the average) over the packages labeled by volume, cost about \$7.50 more per package, and the additional weight of beads will be discarded in actual use.

#### **2.3.5.** Incense

(L&R, 1978, p. 151)

#### Interpretation

Incense labeled by count is fully informative and sufficient.

#### **Background**

The State of Oregon raised the issue of proper quantity declarations for the sale of incense. The question is what if any information, other than count such as weight or volume or length, is necessary for an adequate description on packages of incense. The Committee is of the opinion that a statement of count as defined in § 6.4.1(c) of the Uniform Packaging and Labeling Regulation is fully informative and is sufficient in this case.

#### 2.3.6. Sea Shells

(L&R, 1976, p. 223)

#### Guideline

Sea shells shall be sold by count and weight for packages of 50 sea shells or less, and by volume and weight for packages containing more than 50 sea shells.

#### 2.3.7. Tire Tread Rubber Products

(L&R, 1976, p. 233)

#### Guideline

Tire tread rubber products shall be sold by net weight. The polyethylene film protective backing shall be part of the product and included in the net weight. The core is part of the tare and must be deducted from the gross weight to determine the net weight.

#### 2.3.8. Wiper Blades

(L&R, 1979, p. 182)

#### Interpretation

There is a trade custom of labeling automobile wiper blades by the length of the metal backing or vertebra, not the length of the blade. This is an acceptable method of sale and net contents declaration.

#### **Background**

The Committee received a request from a manufacturer of automobile wiper blades that had a problem with one State concerning the measurement of length as labeled on their packages. The State felt that the proper designation should be the length of the blade itself; the manufacturer said that traditionally the industry measured the length of the metal backing or vertebra.

The Committee, after some discussion, determined that since there was no intent to mislead customers, the traditional measurement of the metal backing or vertebra was acceptable.

#### 2.3.9. Fireplace Logs

(L&R, 1975, p. 174)

#### Interpretation

Time of burning is not an appropriate quantity declaration for fireplace logs. (§ 2.4.3. of the Uniform Method of Sale of Commodities requires single logs to be sold by weight, or if packaged and less than 4 cu ft, weight plus count.)

#### **Background**

The enforceability of quantity declarations using time as the basis of measurement for commodities, including packaged commodities, must be considered carefully if equity in the marketplace is to be achieved. The Committee wishes to stress to those who have submitted time declaration questions that the enforceability factor should not override consumer protection and uniformity considerations. Based on the above criteria, the Committee recommends that the Conference take the position that time is not an appropriate quantity declaration for fireplace logs.

## 2.3.11. Packaged Foods or Cosmetics Sold from Vending Machines

(L&R, 1982, p. 152)

#### Interpretation

Packaged foods and cosmetics sold from vending machines must be labeled the same as similar items not sold in vending machines, including identity, responsibility, net contents, and ingredient declaration, except that § 3.3. of the Uniform Regulation for the Method of Sale of Commodities permits identity and net contents to be posted on the machine in lieu of appearing on the package.

#### Background

As part of its review of the Uniform Regulation for the Method of Sale of Commodities, FDA recommended adding a statement to § 3.3. that packaged foods and cosmetics sold in vending machines must in general be labeled in accordance with requirements for similar articles not sold in vending machines (e.g., ingredient declaration requirements). The Committee recommends that this information be made a guideline rather than incorporated as part of the uniform regulation.

#### 2.3.12. Movie Films, Tapes, Cassettes

(L&R, 1975, p. 174)

#### Guideline

Movie film may be sold by linear measure. Magnetic tapes and cassettes may be sold by either linear measure or playing time.

#### **Background**

The enforceability of quantity declarations using time as the basis of measurement for commodities, including packaged commodities, must be considered carefully if equity in the marketplace is to be achieved. The Committee wishes to stress to those who have submitted time declaration questions that the enforceability factor should not override consumer protection and uniformity considerations. The committee further recommends that the States follow FTC guidelines in requiring lineal measure for the sale of movie films and permit either linear measure or playing time for magnetic tapes and cassettes.

#### 2.3.13. Vegetable Oil

(L&R, 1983, p. 208)

#### **Guideline and Interpretation**

Packaged liquid vegetable oil must be labeled by liquid volume, although net weight may also be declared.

#### **Background**

Packages of liquid vegetable oil are being sold for restaurant and other small food business use labeled by weight. It has been brought to the attention of the Committee that containers of product labeled "5 gallons" look identical in dimensions to those labeled "35 pounds," but the density of the vegetable oil is such that the 35-pound cans contain only about 4-1/2 gallons. The Institute of Shortening and Edible Oils indicated that companies selling liquid vegetable oils often compete with those selling solid shortening, and that a net weight comparison is useful for these purposes. Recipes for food products in large sizes sometimes provide ingredient quantities by weight or volume.

It is the opinion of the members of the Committee that packaged liquid vegetable oil <u>must</u> be labeled by liquid volume, although a net weight may be declared in addition to the net volume statement.

When a single manufacturer of vegetable oil packages the same oil in the same size container with two such widely different net quantity statements, this practice could easily be considered (a) misleading to the customer, and (b) nonfunctional slack-fill. Weights and measures enforcement action should be taken.

#### **2.3.15.** Bulk Sales

(L&R Committee, 1986, p. 140)

When packaged or wrapped items (such as individually wrapped candies) are sold from bulk displays by weight, the price must be based on the net weight, not the weight including the individual piece wrappings. This will require (1) subtracting the weight of the bag into which the customer puts the pieces plus (2) subtracting the weight of

the piece wrappings (the latter is a percentage of the gross weight--that is, the tare increases as the customer selects more of the commodity).

#### Background

Retail food stores are merchandising prepackaged commodities such as candies, pet food, snack bars, and bouillon cubes from bulk displays. Some retailers sell these products by gross weight. Section 1.2. of the Uniform Weights and Measures Law reads in part: "The term 'weight' as used in connection with any commodity means net weight. . ." A copy of a letter to the Chairman of the Conference and his response appear as Appendix A to this report. The Committee applauds the Chairman's response to the request and affirms the need for strong enforcement action in this area, rather than any changes to existing laws or regulations.

A workshop was held on June 20, 1986, at the U.S. Department of Commerce, Washington, DC, to explore the issues and alternatives involved in the sale of prepackaged goods from the bulk food sales areas of supermarkets. Representatives of the packaging, supermarket, and small grocery industries; scale and point-of-sale (POS) systems manufacturers; the U.S. Food and Drug Administration; weights and measures agencies, and the National Institute of Standards and Technology attended. No final recommendations came out of this meeting; however, the participants express an interest in meeting again after a written report of the June 20 meeting was made available and before the Interim Meetings of the NCWM in January 1987. The following issues were discussed:

1. Prepackaged commodities in bulk displays are being sold on a gross weight basis.

Federal regulations covering packaged goods and every state Weights and Measures Law require any sale by weight to be "net weight" (not including the weight of the wrapping materials). In some areas of the nation, many items are being sold on a gross weight basis in the supermarkets, for example, fresh fruit and vegetables in poly bags in the produce area. Perhaps because of the light weight of these bags (that is, the minimum size of the scale division on the ordinary supermarket checkout scale is large with respect to the weight of the poly bags), low priority is given to correcting this sales practice, and a lack of uniformity in enforcement of the net weight requirements results. Weights and measures officials have found tare amounting to over 40 percent of the gross weight in prepackaged items sold from bulk; the majority of cases seems to range from 3 percent to 12 percent. Officials see the need to "draw the line" in a sales practice that appears to have evolved from other practices that were not heavily monitored and corrected at their inception.

2. Retailers face technical and administrative problems in properly deducting tare from the gross weight.

Automatic deduction of tare is preferable for large-scale retailers because of its speed. No equipment (either standalone scale or POS) is available at the present time that can: (1) subtract a percentage of the gross weight to represent the tare weight; or (2) subtract a fixed tare for the bag and a percentage tare for the wrapper on the prepackaged item. [Editor's Note: There is equipment now available that can deduct a tare that is a percentage of the gross weight.] Two POS system manufacturers said that new systems with percentage tare capability could be designed, but they could not definitely say whether retrofitting existing systems was possible. They said that the ability to retrofit declined with the age of the system. Supermarket representatives expressed concern that their in-store computer software would need modification above and beyond the retrofitting or software redesign that might be done by the POS manufacturers; their software is designed around current POS software.

Deduction of tare in the bulk food area using a scale other than the checkout scale can be done more easily than at checkout if a POS system is being used. A tare look-up table used in conjunction with the scale appears to be the only currently used method that meets the net weight requirements when packaged products are sold from bulk. (The procedure is to gross weigh the product, look up the tare, subtract it from the gross weight, and then determine a final net weight and total price.)

Each retailer will have to consider the cost of additional manpower (as the weighing and marking of the purchase in the bulk food area might require), new equipment (purchasing scales or POS systems with percentage tare capability), or retrofit of existing equipment as compared with the value of the market share contributed by the bulk marketing of prepacked commodities. However, two supermarket chain representatives said that they expected some growth in this type of sale (because of the customers' perception of cleanliness of the product, for example).

3. Present methods of sale and advertising are often misleading.

Suggestions were made that advertising on a "wrapped weight" basis would properly inform the consumer. However, it was pointed out that a typical purchaser does not know what "wrapped weight" is (i.e., gross weight). Moreover, selling packaged goods on a gross weight basis is illegal; it thwarts value comparison with other products sold by net weight.

Bulk food sales advertising often includes claims of savings of, for example, 10 percent to 20 percent over a purchase of the same commodity in standard-pack form. These

advertising claims can be exaggerated and misleading if the comparisons referenced are between standard-pack commodities sold net weight and products sold from bulk on a gross weight basis.

The possibility of advertising a net weight unit price, but actually weighing at the checkout on a gross weight basis (and charging at a lower gross weight unit price) was discussed. For example, a sign could be posted with the following:

"\$1.50 per pound, net weight. We are not able to weigh this packaged product on a net weight basis (that is, without the wrapper), and will therefore charge you \$1.40 per pound including the wrapper weight at the checkout."

Everyone agreed that advertising claims and appropriate wording would have to be chosen carefully if this is to be viable. However, those weights and measures officials present were generally opposed to this alternative based on the difficulty of enforcement and lack of assurance that a consumer would really understand explanatory signage.

#### 2.3.16. Animal Bedding

(L&R, 1988, p. 159)

#### **Recommended Method of Sale**

Animal bedding of all kinds, except for baled straw, should be sold by volume, that is, by the cubic meter, cubic yard, cubic foot or cubic inch.

The test method in Handbook 133, § 4.11. Peat Moss, can be used for animal bedding. The test official should "fluff up" or in some way reduce the amount of compaction of product that may occur under ordinary packaging and distribution processes prior to testing.

# 2.5.6. Guidelines for NCWM Resolution of Requests for Recognition of Moisture Loss in Other Packaged Products

(Exec, 1988, p. 94)

The Task Force on Commodity Requirements limited its work to only a few product categories, using these categories as models for addressing moisture loss. The gray-area concept is the result of this work.

Recognizing several candidates for future work in moisture loss, the Task Force recommends that the following guidelines for moisture loss be followed as far as possible by any industry requesting consideration:

1. There should be reasonable uniformity in the moisture content of the product category. For example, since pet

food has final moisture contents ranging from very moist to very dry, some subcategorization of pet food needs to be defined by industry before NCWM study of the issue.

- 2. The predominant type of moisture loss (whether into the atmosphere or into the packaging materials) must be specified.
- 3. Different types of packaging might make it necessary to subcategorize the product. For example, pasta is packaged in cardboard, in polyethylene, or other packaging more impervious to moisture loss. The industry should define the domain of packaging materials to be considered.
- 4. "Real-world" data is needed on the product as found in the retail marketing chain - not just laboratory moisture-loss data.
- 5. The industry requesting consideration of moisture loss for its product should collect data on an industry-wide basis (rather than from only one or two companies).

Information concerning the relative fractions of imported and domestically produced product should be available, for example, in order to assess the feasibility of interacting with the manufacturer on specific problem lots.

- 6. Moisture loss may occur either:
  - during manufacturing; or
  - during distribution.

Data will be needed to show the relative proportion of moisture loss in these different locations, since moisture loss is permitted only under good distribution practices. Geographical and seasonal variations may apply.

- 7. A description of the processing and packaging methods in use in the industry will be of great value, as will a description of the distribution system and time for manufacturing and distribution. A description of the existing net quantity control programs in place should be given, together with information on how compliance with Handbook 133 is obtained. A description of maintenance and inspection procedures for the scales should be provided, together with information on suitability of equipment and other measurements under Handbook 44.
- 8. A description of Federal and local agency jurisdiction and test should be given, as well as any regulatory history with respect to moisture loss and short weight. Has weights and measures enforcement generated the request? What efforts have addressed the moisture loss issue prior to approaching the NCWM? Are the appropriate Federal agencies aware of the industry's request to NCWM?

9. The industry should propose the type of compliance system and/or moisture determination methodology to be used. The compliance scheme, if it contains industry data components, should be susceptible to verification (as examples: USDA net weight tests for meat; or exchange of samples with millers for flour), and should state what the companies will do to provide data to field inspection agencies in an ongoing fashion (as the gray-area approach requires). If in-plant testing is to be combined with field testing, who is to do such testing, and how is this to be accomplished? It should be possible to incorporate the proposed testing scheme into Handbook 133, and used with Category A or B sampling plans.

When all the preliminary information recommended above has been collected, a field test of the proposed compliance scheme should be conducted by weights and measures enforcement officials to prove its viability.

See the plan diagrammed on the next page.

### 2.6.1. Retail Gas Sales and Metric Price Computations in General. --

(S&T, 1980, p. 227)

#### Guideline

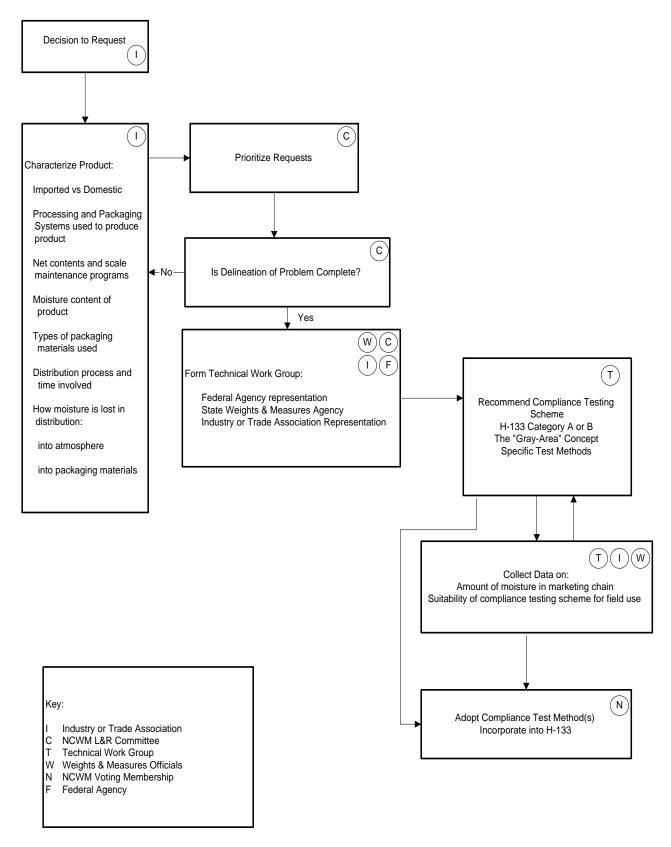
The National Bureau of Standards (now the National Institute of Standards and Technology) published equivalent rounded values for metric equivalents of inch-pound units should be used. They are:

3.785 411 784 liters = 1 gallon 0.264 172 052 4 gallon = 1 liter

A "Rule of Reason" should apply to the corrected value so that the value used is consistent with the quantity of the transaction. The converted value should never have fewer than four significant digits and should have at least the same number of significant digits as the number of significant digits in the quantity of product being converted. For example, if a 1000 gallon delivery were to be converted to liters the value would be 3785 liters; for 10 000 gallons - 37 854 liters, for 100 gallons - 378.5 liters.

In the case of expressing a unit price equivalent for consumer value comparisons in retail gasoline sales, the

# Plan For NCWM Resolution of Individual Requests For Recognition of Moisture Loss



following formula should be used: (advertised, posted, or computing device unit price per liter) x 3.785 = (equivalent unit price per gallon, rounded to the nearest 1/10 cent.)

#### **Examples:**

26.9 cents per liter  $\times$  3.785 = \$1.018 per gallon 26.8 cents per liter  $\times$  3.785 = \$1.014 per gallon 26.7 cents per liter  $\times$  3.785 = \$1.011 per gallon 26.5 cents per liter  $\times$  3.785 = \$1.003 per gallon 26.4 cents per liter  $\times$  3.785 = \$0.999 per gallon

This method is preferable to the alternative method of dividing the price per gallon by 3.785, which results inthesame price per liter for three or more different prices per gallon, when rounded to the 1/10 cent.

## **2.6.2. Price Posting.** -- (L&R, 1981, p. 101)

#### Guideline

- 1. Street Signs
- a. Until such time as the sale of gasoline and other motor fuels is predominately by metric measurement (liter), price per gallon information should be made readily available to all prospective customers.
- b. All street, roadside, and similar advertising signs displaying product price should provide price per gallon information.
- c. Signs showing the equivalent price per liter may also be used, but their use is optional and should not employ numerals larger than the equivalent gallon price display.
- d. Signs should show complete dollar and cents numerals and they should be clearly legible and of full size. An exception should be granted to street signs that were designed to display only three numerals (e.g., \$.899) and not four numerals, as required for prices over \$1.00 per gallon (e.g., \$1.259). Until such signs can be replaced or modified, it would be acceptable:
  - (1) to attach an appropriate sign extension with the decimal fraction of a cent representation in alignment with the posted price,
  - (2) to include a smaller fraction of a cent representation with the last numeral of the posted price, or
  - (3) to add the whole number "one" before the cents values.
- f. The changeover to advertising prices by the liter as a single mode of pricing should be established when 75 percent of all retail outlets in a jurisdiction have converted their dispensers to metric measurement.

#### 2. Posting of Prices at the Dispenser

Each retail outlet should use exclusively only one of the measurement methods of sale (gallon or liter). A change from one method to another should be carried out for all devices dispensing motor fuels in the retail outlet.

In the case of liter sales, suitable posting of per gallon and per liter prices at the device, service island, premises of the retail outlet, or any other locations must be in accordance with State and local laws, regulations, and ordinances, and in a manner that facilitates consumer comparisons between the per gallon price and the per liter price. Additional requirements may be necessary to avoid uncertainty as to nomenclature, location, and size of information on signs.

#### It is recommended that:

- a. current and accurate price comparisons between gallon and liter values be posted at the dispenser, within easy view of the customer and visible from either side of the island;
- b. the sign should show equivalent quantity and price information. For example:

```
27.1\phi per liter = $1.026 per gallon 3.785 liters = 1 gallon
```

- c. Letters and numerals should be at least 3/4 inch (19 mm) in height and 1/8 inch (3 mm) in width of stroke.
- 3. Quantity and Price Display on Dispensers

It is required that dispensers be designed to clearly show all required quantity and price information on the face(s) of a motor-fuel dispenser in accordance with Handbook 44.

#### 4. Dispenser Modification Kits

As an interim alternative to "half-pricing," a number of computer modification kits have been installed to modify existing retail motor fuel dispensers that were not designed to compute and indicate prices over 99.9¢ per gallon.

Some of the modification kits that have been referred to State weights and measures officials for approval have been rejected as failing to conform to Handbook 44 requirements. It is recommended that all modification kits and future modifications of dispensers be so designed and made as to be in full compliance with all applicable requirements of Handbook 44.

#### 2.6.3. Octane Posting Regulations. --

(Liaison, 1979, p. 240)

#### Guideline

Weights and Measures officials should report to FTC any instances of failure to post octane ratings by service

stations. These would most likely occur during routine inspections of service station gasoline dispensers. Reports should be made to the appropriate FTC regional offices as listed below.

#### **Background**

As of June 1, 1979, the FTC requires the determination of octane ratings by refiners, the certification of octane ratings by refiners and distributors and the posting of octane ratings by retailers on all gasoline pumps. The requirements are set forth in Public Law 95-297, the Petroleum Marketing Practices Act (PMPA), passed in June, 1978 and the Federal Trade Commission's Octane Rule, 16.C.F.R. Part 306. Although the octane posting rule has no effect on most FTC Regional Offices, Addresses, and Telephone Numbers:

101Merrmac St. Suite 810 Boston, MA 02114-4719 (617) 424-5960	Suite 1523 1961 Stout St. Denver, CO 80294-0101 (303) 844-2272
Suite 1300 150 William Street New York, NY 10038	Suite 500 100 N. Central Expressway Dallas, TX 75201 (214) 767-5503
Suite 520-A 658 Euclid Ave. Cleveland, OH 44114-3006 (216) 522-7239	11000 Wilshire Blvd. Suite 13209 Los Angeles, CA 90024 (310) 235-7890
Room 1000 1718 Peachtree St., N.W. Atlanta, GA 30367 (404) 347-4837	Suite 570 901 Market St. Suite 570 San Francisco, CA 94103 (415) 356-5270
Suite 1860 55 East Monroe St. Chicago, IL 60604-1073 (312) 353-8156	Central Office: Neil Blickman FTC Octane Rule Coor. 6th St. & Penn. Ave., N.W. Washington, DC 20580 (202) 326-3038

programs administered by State weights and measures officials with respect to checking gasoline dispensing devices for accuracy, the Liaison Committee feels that the Conference should be generally informed about the law and the FTC rule, if only to be prepared to answer inquiries about it or for some possible future enforcement demands. Keeping apprised of developments associated with the rule may be advisable. In addition, it will affect States which have octane certification and posting programs.

The preemption section of PMPA (204) reads as follows:

Section 204. To the extent that any provision of this title applies to any act or omission, no State or any political subdivision thereof may adopt, enforce, or continue in effect any provision of any law or regulation (including any remedy or penalty applicable to any violation thereof) with respect to such act or omission, unless such provision of such law or regulation is the same as the applicable provision of this title.

Section 204 prohibits States and other political subdivisions from enforcing requirements that are not the same as the applicable provisions of this law. Jurisdictions having octane requirements should carefully review with their legal advisors the effect of this law.

The FTC's Octane rule was published in final form on March 30, 1979, in the Federal Register (Vol. 44, No. 63, Part V, pp. 19160-19172). The rule became effective June 1, 1979.

The law requires that refiners determine octane ratings of their products, and certify them to their distributors. The distributors must pass along the certification to the retailer, unless he blends the gas, in which case he may have to certify his blend.

A similar procedure, relating to the posting of octane ratings, is set forth for the retailer. The Federal Trade Commission (FTC) is responsible for enforcement with respect to the accuracy of the certified ratings. The FTC is also empowered to check records, which must be retained for one year by each link in the distribution chain.

The FTC is in need of help from the State and local jurisdictions in the area of surveillance and testing. Such assistance could occur at a number of levels. Notice of octane mislabeling and failure to post octane ratings is requested.

Other levels of assistance would concern jurisdictions that have octane testing programs and would be interested in cooperating with FTC in testing or in reporting discrepancies in octane rating.

Mr. Blickman of the FTC offers his assistance in answering any questions concerning the FTC rule on octane posting, possible Federal-State cooperation, possible future State octane posting regulations, or any other related activity. Such communications should be directed to Neil Blickman, Attorney, Division of Enforcement, Bureau of Consumer Protection, FTC, Washington, DC 20580, Telephone: 202-326-3038.

## 2.6.4. Multi-Tier Pricing: Motor Fuel Deliveries (Computing Pumps or Dispensers). --

(L&R, 1982, p. 150; L&R, 1985, p. 100) (L&R, 1988, p. 162)

#### **Policy**

Charging different prices for the same product depending upon the manner of payment, other purchases, amount of service, etc., is a management decision of the merchandiser. Those merchants who elect to offer multiple prices for motor fuel must comply with the state and local weights and measure laws and regulations, including Handbook 44. They must also make marketing decisions that comply with state truth in lending, cash discount, price advertising, and usury laws. All such laws are intended to prohibit deceptive, misleading, or misrepresentative information being given to the consumer. The following guidelines are intended to apply to price advertising or posting at the streetside or highway as well as at the pump or dispenser, and to the price computed at the device. These guidelines are applicable to other discount or combination offers (such as combination purchases of car wash and gas, for example).

- 1. If a price is posted or advertised, it must be available to all qualified customers. If any condition or qualification is required to obtain the posted price, that condition must also be posted clearly and understandably, in conjunction with the price, wherever it is posted.
- 2. The lowest price may be posted or advertised by itself as long as any restrictions for receiving that price (for example, "cash only") are also clearly posted or advertised in conjunction with the price and as long as other state requirements do not prohibit it. For example, certain states require that all prices available from a given retail location must be posted on streetside signs if any prices are posted.
- 3. If the merchandiser elects to establish separate devices or islands for sale of the same product at different prices, the devices or islands shall be clearly identified as "cash," "credit," "self-serve," or other appropriate wording to avoid customer confusion.
- 4. The use of a single-price-computing dispenser for sale of motor fuel at multiple unit prices is inappropriate, facilitates fraud, and should be eliminated. The NCWM should adopt a plan and timetable for changeover to devices that can compute and display final money values for multiple prices.

### 2.6.5. Cereal Grains and Oil Seeds. --

(L&R, 1981, p. 95)(Amended 1996)

#### Interpretation

The addition of water to grain for the purpose of adding weight prior to selling grain by weight is an illegal practice under Federal laws. **Note:** Effective February 11, 1995, the Federal Grain Inspection Service adopted a regulation in 7 CFR Part 800.61 prohibiting the application of water to grain except for milling, malting, or similar processing operations. See Volume 59, No. 198 for Friday October 14, 1194, or page 52071, for additional information.

#### **Background**

A letter from the Oklahoma Grain and Feed Association was forwarded to the Committee asking whether the addition of water to grain is legal. The request was prompted by an article reporting on methods of adding water to grain to bring the moisture content up to market standards. For example, when soybeans are sold at 8 percent moisture content, there is less weight sold (and less revenue for the soybeans to the seller) than if water were added to the same soybeans to bring them to 10 percent moisture content.

However, the Committee is greatly concerned about the ramifications of such practices. Many grain experts do not believe that over-dried grain should be valued as highly as grain at moisture contents close to market standards. Overly dry grain is more susceptible to breakage, for example.

Water added after harvest will not be taken up chemically the way that naturally moist grain binds water. Errors in adding water or the particular biochemical nature of the grain after addition of water can lead to spoiled grain. Studies on the long-term keeping qualities of grain with water added have not been carried out. The calibration of moisture meters is based on naturally moist grain and there is a known difference between the electrical properties of naturally moist grain and grain with moisture added.

Of a more basic nature, however, the Committee recognizes the fact that a grain buyer purchases grain expecting such grain to be naturally moist or dried, not to be with water added. The seller who adds water to grain solely to add weight, therefore, misrepresents his product.

Both the Food and Drug Administration and U.S. Department of Agriculture have sent letters to the Committee indicating that the addition of water to grain solely for the purpose of adding weight is an illegal practice. Because existing Federal laws already prohibit this practice, the Committee recommends no further action on the part of the Conference at this time.

# 2.6.6. Basic Engine Fuels, Petroleum Products, and Lubricants Laboratory. --

(L&R, 1994, pp 129-135)

(Developed by the Petroleum Subcommittee.)

#### Introduction

The engine fuel testing laboratory is an integral element of an engine fuel inspection program and is generally developed to satisfy the testing requirements as described in the laws and rules of the regulating agency. This document outlines the basic facets of an engine fuels testing laboratory and can be used as a model to initiate or upgrade an engine fuels testing program. Since a fuels testing program is of little value unless recognized standards and methods are utilized, this description of a model laboratory has been developed under the assumption that the universally recognized American Society for Testing and Materials (ASTM) standards and test methods have been incorporated into the laws, rules, and policies of the regulating agency.

This document provides sufficient information to investigate costs associated with the development of a model fuels testing laboratory. Information pertaining to facility needs, recommended ASTM test procedures, test equipment, and the number of personnel required for staffing has been included. Hidden costs associated with the unique working environment of laboratories are often overlooked during initial evaluations; therefore, sections have also been included dealing with quality assurance, safety, and hazardous materials.

Laboratories may be required to perform additional analyses outside the purview of consumer regulations, e.g., analyses pertaining to environmental regulations or tax fraud investigations. This document will not address those areas specifically; however, information presented here may assist in the determination of general costs and requirements.

#### **State-Operated or Contract**

The decision to operate a State testing laboratory, to enter into a contractual agreement with a private fuels testing laboratory, or to have a hybrid of the two depends on a variety of factors: the scope of the program, funding sources, political climate, etc. The question is often asked: "Is there a point at which it is cheaper for a State to operate its own fuels testing laboratory?" The Motor Fuel Task Force assembled in 1984 concluded that a program testing 6000 samples per year (500 samples per month) is the minimum level to justify building and equipping a fuels testing laboratory.

This estimate remains a valid guideline for determining the practicality of the initial investment for a fuels testing laboratory. However, consideration must be given to the time required for a laboratory to complete the analyses. The value of any inspection program is diminished if laboratory turnaround time is so great that the product is consumed before the results of an analysis are known. If a contract laboratory is chosen, analysis time should be given consideration during negotiations to ensure an effective program; likewise, a State-owned laboratory should be

assured the proper resources, e.g., a full staff and well maintained instruments, to be able to meet a satisfactory turnaround time.

#### **Laboratory Facility**

A fuels testing laboratory requires a unique building designed to accommodate laboratory instruments ranging from a delicate gas chromatograph to octane engines capable of producing severe vibrations. In addition, extremely flammable liquids will be stored and tested throughout the facility. Obviously, the facility design must minimize the chances of explosion and fire and also be capable of withstanding the forces of an explosion. National Fire Protection Association (NFPA) 45, "Standard on Fire Protection for Laboratories Using Chemicals," should be reviewed with contractors to ensure minimum standards are met.

Special considerations should be given to the following:

- 1. Sufficient ventilation to ensure that workers are not unduly exposed to gasoline fumes or other toxic vapors.
- 2. Fume hoods and exhaust systems in laboratory areas.
- 3. Drain lines resistant to acid and petroleum products.
- 4. Traps to prevent petroleum products from entering the sewer system.
- 5. Special foundations for ASTM/Cooperative Fuel Research Committee (CFR) engines. It is recommended that sufficient foundations for future expansion be installed during initial construction.
- 6. Necessary safety equipment, such as fire blankets, fire extinguisher, eyewash stations, etc.
- 7. Automatic fire extinguishing system for laboratory areas. The extinguishing system's design should include considerations regarding the susceptibility of laboratory instruments to damage when exposed to water or dry chemicals.
- 8. An adequate heating, ventilation, and air conditioning (HVAC) system to handle excess heat generated by distillation instruments and octane engines.
- 9. A properly designed and sized electrical system.
- 10. The laboratory's design must ensure that all fuels testing can be performed in accordance with ASTM requirements. This consideration is especially important for the CFR engines. Volume 05.04 of the Annual Book of ASTM Standards contains valuable information regarding the design of a knock-testing laboratory.

11. Automatic hydrocarbon monitors to warn of critical accumulation of explosive vapors.

Several fixed equipment items are necessary for the laboratory's operation, including:

- 1. Air compressor and piping of sufficient size to supply the entire laboratory's needs.
- 2. Gas and water piped to all areas of the laboratory.
- 3. Storage area for excess fuel after analyses. Depending on the number of samples, this may consist of a properly ventilated storage area with 55-gallon drums to several 500-gallon storage tanks. (Larger tanks may be needed if they are to supplement the program's vehicle's needs.)

The size of the laboratory will depend upon the needs of the agency and the scope of the fuels testing laboratory. The following space listing is for a small laboratory capable of testing approximately 6000 samples per year. Some space requirements, such as those for octane testing, may seem large, but it is strongly recommended that two additional engine foundations be installed during initial construction.

- 1. Offices, bathroom facilities, conference room, etc. (as required). No space requirements are listed as this must be determined by the user based on program needs and local building codes.
- 2. Octane laboratory designed for four engines (75  $m^2$  [800  $ft^2$ ])
- 3. General laboratory (70 m<sup>2</sup> [750 ft<sup>2</sup>])
- 4. Distillation laboratory 37 m<sup>2</sup> [400 ft<sup>2</sup>])
- 5. Shipping and receiving (includes preparation area for empty sample containers) (37 m<sup>2</sup> [400 ft<sup>2</sup>])
- 6. Flash point laboratory (19 m<sup>2</sup> [200 ft<sup>2</sup>])
- 7. Shop area (23 m<sup>2</sup> [225 ft<sup>2</sup>])
- 8. Storage for supplies (23 m<sup>2</sup> [225 ft<sup>2</sup>])
- 9. Secured, cooled, and ventilated sample and flammable storage area (23 m<sup>2</sup> [225 ft<sup>2</sup>]). (Insulation and a dedicated ventilation and cooling system should be considered for this room.)

Total square footage (exclusive of item 1) -- 30 m<sup>2</sup> (3225 ft<sup>2</sup>). Including offices, bathroom facilities, hallways, etc., the total building size may exceed 372 m<sup>2</sup> (4000 ft<sup>2</sup>).

#### **Tests and ASTM Test Procedures**

Careful consideration should be given to the selection of laboratory test procedures since these selections will affect instrument costs, number of personnel, timeliness of samples, and confidence in results. As previously mentioned, ASTM specifications and test methods are universally recognized standards for engine fuels and should be the primary choice for test procedures. The ASTM Subcommittee D 02 on Petroleum Products and Lubricants is responsible for developing engine fuel specifications and is generally comprised of representatives from the petroleum industry, automotive manufacturers, and regulating agencies. This representation ensures that test procedures have been reviewed by each segment of the testing community and laboratory results obtained utilizing these procedures will be widely accepted.

New instrumental methods are often introduced to facilitate testing engine fuels. Chemical methods have been devised to replace or screen physical methods which may enhance efficiency by reducing staff or analysis time necessary to perform physical methods. These methods are normally devised for a controlled environment, such as a processing plant, where the chemical components of the samples are generally known and a correlation between the chemical components and physical parameters may be drawn with confidence. A new laboratory is cautioned to refrain from investing in this instrumentation and the laboratory expertise necessary to perform the test procedure until the test procedure has been approved through ASTM. Screening methods have been employed by State laboratories to maintain or increase sample coverage. Screening procedures are a deviation of accepted ASTM procedures; certain sections of a procedure may be excluded or modified, such as chilling a sample to the appropriate temperature or accurately timing a distillation analysis. When a screened sample exceeds an predetermined parameter, the sample is analyzed using the proper ASTM procedure. Screening should be discouraged as a means to increase sample coverage. Strategies, such as selective sampling and testing, should be employed as a means for effective regulation.

Following are references to ASTM fuel specifications and testing procedures which form an effective nucleus for an engine fuels testing laboratory with consumer regulatory responsibilities. ASTM test methods listed here do not necessarily exclude other ASTM procedures that are designed for the purpose and that give comparable results. While kerosene is typically not used as an engine fuel, the test procedures are very similar to the diesel test procedures; therefore, many States include kerosene in their jurisdiction for fuels testing. The significance of each of these analyses is included in the ASTM specifications. Asterisks after test methods indicate a preferred method due to cost or ease of implementation.

#### **Spark Ignition Engine Fuel**

Specifications	D	<b>4814</b> 1.	Distillation	D 86
1. Distillation	D	86 2.	Water Reaction	D 1094
2. Octane (Antiknoc Research		3.	Freezing Point	D 2386
Motor			Knock Characteristic	D 2700
3. Vapor Pressure  Dry Method	D	<b>Av</b> 4953	riation Turbine Fuel	D 1655
Automatic M Mini Method	Iethod D		Flash Point	D 56
Oxygenate Conter			Distillation	D 86
	n D		Water Reaction	D 1094
5. Sulfur Content X-Ray Spect Microcoulon X-Ray Fluore	netry D	3120 4294 <b>La</b>	Freezing Point  boratory Equipment and Supplies ientific instrumentation is typically more	D 2386
6. Lead Content	D	2 3237 ini 2 5059 pur me	tially anticipated even when one harchasing equipment. ASTM has recepthods utilizing automated instruments when the control of	as experience ently approved nich may prove
7. Workmanship	D		be a better long-term investment when erating personnel are included.	n the costs of
Diesel Fuel Specifica	tions D	975	etane Testing	
1. Flash Point	D	93	-	
2. Distillation	D	1 86	CFR Research Method Engine	\$106,000
3. API Gravity	D	1 1298	CFR Motor Method Engine Fuel Blending System	106,000 4,000
4. Sulfur Content		1	ruei Biending System	4,000
X-Ray Spect X-Ray Fluor		2622 4294 *	Humidity controller for CFR engines	2,000
5. Cloud Point	D	2500	Complete set of tools	5,000
6. Water and Sedime		1796	Lift for removing cylinders	2,500
Kerosene Specificati	ons D	3699	Supplies, spare parts, etc.	25,000
1. Flash Point	D	56	Total	\$250,500
2. Distillation	D	86	stillation Testing	
3. Sulfur Content X-Ray Spect X-Ray Fluore	- 1	2 2622 4294 * 1	Explosion proof refrigerators (18 cu ft)  Mercury Barometer	\$5,500 350
4. Color	D	156 2	Mechanically refrigerated 4-unit distilla apparatus	ation 8,000
5. Water and Sedime	ent D	1796	Temperature-controlled baths	2,000
<b>Aviation Gasoline</b>	D	910	-F	2,000

Total	\$ 15,850	1 Oven for drying sample containers (glass)	3,500
<b>Note:</b> Automated distillation units (\$20,000 each) may be substituted for the manual distillation units. The increased		-	,
cost can be justified by a reduced staff		1 7.6 liter/hour water still	4,000
precision of the instruments.		1 Analytical balance	3,000
Vapor Pressure (RVP) Testing		2 Bottle Washers	4,000
1 Grabner	\$13,000	Total	\$32,500
1 McCleod Gauge	300	Information Management System  No recommendations are made for an	information
1 Vacuum Pump (2-Stage)	350	management system. However, it should be information management system is an effective of the communication of the communications are induced in the communication and the communication in t	noted that an
Total	\$13,650	manage data and statistical information wh sampling strategies and when measuring	nen devising
<b>Sulfur Testing</b>		effectiveness of a program.	ine general
1 X-Ray fluorescence analyzer	\$25,000	Minimum requirements for an information system include a database server and database	
m . I	Φ25 000	handle sample biographical and analyses info	ormation. A
Total	\$25,000	means to network technicians and staff to the in necessary to facilitate transfer of	
Oxygenate Testing		Considerations for software security and equipartime (limited access to the database server) should	
1 Gas Chromatograph	\$30,000	ensure the integrity of the data.	d be given to
Total	\$30,000	Many departments have established	information
10001	Ψ50,000		
	Ψ30,000	management centers which are consulted information. Generally, these departments have	
Lead Testing			e a particular
	\$22,000	information. Generally, these departments hav protocol for developing an information manage	e a particular
Lead Testing		information. Generally, these departments hav protocol for developing an information manage  Office Equipment and Supplies  No listing is given since needs are determined.	e a particular ement system.
Lead Testing  1 Atomic absorption instrument	\$22,000	information. Generally, these departments hav protocol for developing an information manage  Office Equipment and Supplies  No listing is given since needs are determ program's scope. However, the cost of items si filing cabinets, typewriters, forms, and miscella	re a particular ement system.  nined by the uch as desks, aneous office
Lead Testing  1 Atomic absorption instrument  Total	\$22,000	information. Generally, these departments hav protocol for developing an information manage  Office Equipment and Supplies  No listing is given since needs are determ program's scope. However, the cost of items so	re a particular ement system.  nined by the uch as desks, aneous office
Lead Testing  1 Atomic absorption instrument  Total  Diesel-Kerosene Testing	\$22,000 \$22,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determed program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning.	re a particular ement system.  nined by the uch as desks, aneous office
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers	\$22,000 \$22,000 \$3,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing	re a particular ement system.  nined by the uch as desks, aneous office ng an initial
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers	\$22,000 \$22,000 \$3,000 5,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determined program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing  Distillation Testing  RVP Testing	e a particular ement system.  nined by the uch as desks, aneous office an initial  \$250,500 15,850 13,650
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity	\$22,000 \$22,000 \$3,000 5,000 250	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing	sparticular sement system. Sparticular sement system. Sparticular sement system. Sparticular system. Spart
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity  1 Saybolt chronometer for color test  1 Cloud/Pour Point Apparatus	\$22,000 \$22,000 \$3,000 5,000 250 1,800 8,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing Lead Testing	see a particular ement system.  Inined by the uch as desks, aneous office an initial  \$250,500 15,850 13,650 25,000 30,000 22,000
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity  1 Saybolt chronometer for color test  1 Cloud/Pour Point Apparatus Total	\$22,000 \$22,000 \$3,000 5,000 250 1,800	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing Lead Testing Diesel-Kerosene Testing Miscellaneous Items	\$250,500 15,850 13,650 25,000 30,000 22,000 18,050 32,500
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity  1 Saybolt chronometer for color test  1 Cloud/Pour Point Apparatus	\$22,000 \$22,000 \$3,000 5,000 250 1,800 8,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing Lead Testing Diesel-Kerosene Testing Miscellaneous Items Information Management System	sparticular ement system.  spanning by the uch as desks, aneous office an initial spanning an initial spanning
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity  1 Saybolt chronometer for color test  1 Cloud/Pour Point Apparatus Total  Miscellaneous Items  100 Sample cases for sample	\$22,000 \$22,000 \$3,000 5,000 250 1,800 8,000 \$18,050	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing Lead Testing Diesel-Kerosene Testing Miscellaneous Items Information Management System Office Equipment and Supplies	sparticular sement system. Sparticular sement system. Sparticular sement system. Sparticular sparticul
Lead Testing  1 Atomic absorption instrument Total  Diesel-Kerosene Testing  2 Tag-closed cup flash testers  2 Pensky-Martens flash testers  10 Hydrometers for API gravity  1 Saybolt chronometer for color test  1 Cloud/Pour Point Apparatus Total  Miscellaneous Items	\$22,000 \$22,000 \$3,000 5,000 250 1,800 8,000	information. Generally, these departments have protocol for developing an information manage.  Office Equipment and Supplies  No listing is given since needs are determing program's scope. However, the cost of items is filing cabinets, typewriters, forms, and miscella supplies must be considered when planning budget.  Summary  Octane Testing Distillation Testing RVP Testing Sulfur Testing Oxygenate Testing Lead Testing Diesel-Kerosene Testing Miscellaneous Items Information Management System	sparticular ement system.  spanning by the uch as desks, aneous office an initial spanning an initial spanning

#### **Quality Assurance/Quality Control**

The previous sections have addressed structural aspects of an engine fuels testing laboratory: building requirements, testing procedures, and analytical instruments. The management system for a laboratory is as unique as the structural requirements. Quality assurance/quality control programs were originally devised to give statistical verification of analytical results; however, they are now evolving to become the standard management model for laboratories. Chain of custody procedures, sample retention procedures, sample distribution procedures, and documentation of each step has been integrated into the quality assurance program.

The petroleum industry, as well as many other industries, has recently shown an inclination toward the International Organization for Standardization (ISO) model quality assurance program, ISO 9000, which provides guidelines for implementation of a quality system. ISO 9000 addresses fundamental issues of a quality system including the responsibilities of management, necessary documentation, provisions for internal and external audits, personnel requirements, environmental considerations, equipment suitability, traceability, and record keeping. ISO/IEC Guide 25, "General Requirements for the Competence of Calibration and Testing Laboratories," provides an overview of the requirements for an ISO 9000 quality system. There is no accreditation program specifically for State engine fuels testing laboratories and ISO 9000 accreditation is currently quite expensive; however, the ISO 9000 is an excellent model to use in developing a management system.

Regulatory agencies, the regulated industry, and consumers must have confidence in analytical results obtained from the testing laboratory. Statistical verification of obtained results will come through performing tests on internal quality assurance samples (standards, duplicates, spikes, etc.) and exchanging samples with other laboratories. ASTM operates a National Exchange Group (NEG) to distribute fuels among participating laboratories and provides a statistical report of the results. There are three subgroups of the NEG: the Motor Fuel Exchange Group, the Diesel Fuel Exchange Group, and the Aviation Gasoline Exchange Group. Of three types of participation, only two will concern a state laboratory: a "member" laboratory receives monthly samples and agrees to participate in special methods research; and a "quarterly participant" receives two sets of samples every 3 months but is not bound to run special tests. The fee for members or for quarterly participants is \$150 per year. The NEG will provide a means for assessment of quality at the national level. There are also regional groups which provide similar quality assessment exchange programs: Appalachian, Atlantic, Great Lakes, Mid-Continent, Northwest, Pacific Coast, Rocky Mountain, Texas Regional Groups and LA Gulf Coast, Sabine, and Texas City-Houston Subgroups. In addition, ASTM has established the Interlaboratory Crosscheck Program which is an exchange program covering an expanded range of test procedures. If a laboratory is required to perform the full set of ASTM tests listed in the specifications for gasoline, diesel, and aviation gasoline, this particular program will be useful in collecting pertinent quality assurance information.

#### **Safety Program**

A laboratory can be an extremely hazardous work environment, so safety must be integrated into all operations of a laboratory. The Occupational Safety and Health Administration (OSHA) established a requirement effective January 1, 1991, for laboratories to develop a Chemical Hygiene Plan (29 CFR 1910.1450). The guidelines for the Chemical Hygiene Plan were left intentionally general so that an organization's plan could be customized for unique situations in individual laboratories. The Chemical Hygiene Plan details an organization's responsibilities for safety training, supply and maintenance of safety equipment and personal protective equipment, monitoring employee's exposure level to hazardous chemicals, medical consultation and examination, and availability of documents addressing safety procedures and emergency response. The Chemical Hygiene Plan is required to be reviewed annually which provides a format to plan and track improvements.

Reference documents are an essential part of an effective safety program. Safety procedures should accompany and complement testing procedures to ensure an employee is performing functions in an acceptable manner. Emergency response manuals address hazardous or potentially hazardous situations. Proper procedures for handling large spills, evacuation of work areas, and employees who have been overexposed to hazardous materials are typically found in the emergency response manual. Material Safety Data Sheets (MSDS) contain pertinent information regarding the hazards of chemicals and the necessary precautions. These documents should be distributed to employees or located in an easily accessible location.

Coordination with local fire and hazmat departments is essential to ensure rapid emergency response. A chemical inventory and a diagram of the laboratory space is often requested by these departments to expedite their response. Periodic review of the chemical inventory will ensure unnecessary chemicals will be disposed of in a timely manner.

The most effective safety tool is thorough training of employees. Each new employee should be trained with the Chemical Hygiene Plan, safety procedures, emergency response manual, and MSDS's. Subsequent review sessions should be scheduled to ensure familiarity of individual responsibilities and actions. Educational videos are

available specifically addressing laboratory safety which can assist in the training process. Hands-on training should be utilized to demonstrate the proper use of fire extinguishers, fire blankets, and other safety equipment in the laboratory. An effective safety program will produce aware employees who can suggest enhancements to improve the safety of the laboratory.

Personal safety equipment should be provided to all laboratory personnel. Eye protection, lab coats/aprons, and gloves will provide minimum protection. If the use of a fume hood is not practical and an employee is exposed to petroleum or other chemical fumes, organic respirators should be provided to minimize exposure. Determination of which equipment is necessary for handling particular chemicals can be found in the MSDS accompanying the chemicals.

General laboratory safety equipment should be considered during the design or selection of a building. In addition to a good ventilation system, fume hoods should be provided where practical to isolate fumes from the laboratory. Due to the explosive nature of gasoline, even safety equipment needs to be evaluated for safety; for example, explosion-proof motors should be installed to evacuate fumes from a hood. Eyewash stations, fire extinguishers, emergency showers, and fire blankets should all be placed strategically for maximum protection.

In the event of a spill or fire, several safety items will prove useful. Activated charcoal, sold under a variety of names, is effective for absorbing small petroleum spills with the added benefit of quickly reducing vaporization. Other companies offer pads to quickly absorb spills. Similar products are offered to neutralize and adsorb acids and bases. Safety signs should be posted at the entrance of each laboratory room listing possible hazards and restricted activities (e.g., No Smoking, Flammables, Eye Protection Required, etc.). These signs assist visitors and emergency response personnel to identify hazards quickly.

#### **Hazardous Waste**

Engine fuels testing laboratories generate small quantities of hazardous waste. Used oil from CFR engines and waste chemicals from various analyses must be stored and disposed in an appropriate manner. The majority of regulations for storage, disposal, and documentation of hazardous materials may be found in EPA's SARA Title III, 40 CFR 1500. Additional regulations and permits may be required by State, county or municipal agencies. Familiarity with the regulations will be advantageous when considering the design of the laboratory. Specific expenses related to hazardous waste disposal will often be determined by local regulations and the availability of hazardous waste handlers.

#### Personnel

The staffing requirements for an engine fuels testing laboratory will be dependent on the number of samples, the number of tests performed on the samples, and the testing instruments chosen. The staff recommended here will be suitable for a laboratory with moderate automation (autosampler for the gas chromatograph, automated RVP instrument, etc.) running approximately 6000 to 8000 samples per year.

- 1 Laboratory Administrator
- 2 Chemists
- 2 CFR Engine Operators
- 2 Laboratory Technicians
- 1 Clerk

The laboratory administrator should have strong management skills and familiarity with laboratory operations and chemical techniques. The administrator's responsibilities include the development and implementation of the quality assurance program, safety program, and hazardous waste program, as well as providing guidance for the daily operations of the laboratory.

The chemists should have a strong chemistry background and familiarity with instrumental techniques. In addition to normal analytical responsibilities, chemists should assist with the review of analytical results by technicians. Chemists also can assist in the development and implementation of the quality assurance, safety, and hazardous waste programs.

The engine operators are the most difficult positions to fill. The ideal operator will have petrochemical experience with a mechanic's background since the majority of the engine maintenance will be performed by the operators. The petroleum industry estimates approximately 5 years of engine operation is necessary to develop an expertise. To expedite this process, engine operators should periodically attend training workshops. Laboratory technicians should have laboratory experience and a familiarity with scientific methods. Cross training of these individuals is an effective means of maintaining an even workflow through the laboratory.

#### **Concluding Note**

There is no better way to understand the complexities of testing than to visit a state with an active program. Several States, such as Arkansas, California, Florida, Georgia, Maryland, North Carolina, Missouri, Michigan, Washington, and Tennessee (a contractual laboratory) have active programs and are willing to host tours of their facilities. Interested parties are encouraged to make such a visit.

#### References:

John E. Nunemaker, "Planning Laboratories: A Step by Step Process" *American Laboratory* March 1987, *19* (4), 104-112.

Jery Koenigsberg, "Building a Safe Laboratory Environment" *American Laboratory* June 1987, *19* (9), 96-106.

#### 2.6.7. Product Conformance Statements --

#### Interpretation

References to a product's conformance with product standards (for example, "manufactured to standard EN235" or similar product conformance statements) on labels for wallcovering or other products, are not considered qualifying terms and do not violate 6.12.1. Supplementary Quantity Declarations of the Uniform Packaging and Labeling Regulation, *provided* the requirements of § 8.1.4. Free Area are met.

#### **Background**

The Wallcovering Manufacturers Association requested the Conference's position on the use of conformance statements on the labels of wallcovering and border material. This issue relates to wallcovering products that originate from manufacturers in Europe where a declaration of conformance to a specific government standard is required on consumer packages. Thousands of product "standards" or "Euronorms" are being established for the European Community. Conformance declarations are required to provide consumers and customs officials with information on the product. The issue relates to the use of such statements as "manufactured to standard EN235" on labels of wallcovering that are imported from Europe. The WMA requested the Committee's opinion on the use of this type of statement if a package is labeled in conformance with sections 6.12.1. - Supplementary Quantity Declarations and 8.1.4. - Free Area. One question is whether the display of the conformance statement would be permitted provided that it did not include an unacceptable quantity declaration. Another question concerns the need to comply with the requirement for adequate free area around the quantity declaration when the conformance declaration is placed on the label. It was the Committee's opinion that conformance statements on package labels would not violate any provisions of the PLR if the requirements of 6.12.1. and 8.1.4. are met.

The Committee recommended this interpretation for inclusion in Handbook 130 because it is likely that this type of notice will become common as more and more free market trading areas are opened to expand international trade. This interpretation does not indicate acceptance or

endorsement of any requirements contained in product conformance statements.

(Added 1992)

# 2.6.8. Commodities Under Federal Trade Commission Jurisdiction under the Fair Packaging and Labeling Act and Exclusions.--

The following lists indicate the commodities and commodity groups that are and are not within the scope of the Fair Packaging and Labeling Act administered by the Federal Trade Commission (FTC). The following codes appear with each excluded commodity and designate the reason that the particular commodity has been excluded.

**BATF** - designates commodities subject to laws administered by the Bureau of Alcohol, Tobacco, and Firearms.

CI (Commission Interpretation) - designates those categories that have been excluded by the Commission in the light of legislative history of the definition of "consumer commodity." By applying this definition to individual commodities, the Commission has more narrowly applied the latter term and set forth a list of items that do not meet the criteria of consumer commodities. On occasion the Commission is requested in both a formal and informal manner to consider individual products and to determine their status relative to the definition of "consumer commodity" as it is used in the Act.

**EPA** - designates commodities subject to the Federal Environmental Pest Control Act of 1972 administered by the Environmental Protection Agency.

**FDA** - designates those commodities which are subject to regulation by the Food and Drug Administration either under the portion of the FPLA administered by that agency or the Federal Food, Drug, and Cosmetic Act. (Section 10(a) (3) and Section 7 of the FPLA). Following the code FDA will be a letter further designating the commodity as either a food (F), drug (D), cosmetic (C), or device (DV).

**USDA** - designates those commodities excluded from jurisdiction by Section 10(a) of the FPLA and represents a commodity within one of the following categories: meat or meat products, poultry or poultry products, or tobacco or tobacco products.

It may be of some help in ascertaining whether a particular product is or is not included within the FPLA definition of "consumer commodity" and thus subject to FTC jurisdiction under that Act, to refer to the following definition:

"... Any article, product, or commodity of any kind or class which is customarily produced or distributed for sale through retail sales agencies or instrumentalities for consumption by individuals, or use by individuals for purposes of personal care or in the performance of services ordinarily rendered within the household, and which is usually consumed or expended in the course of such use."

By applying these criteria to the particular product in question and then reviewing the list of excluded commodities, the observer will be able, in most instances, to determine the status of the item. In the event, however, that the observer is unable to ascertain whether a particular commodity is covered or excluded from FTC jurisdiction, contact FTC for an opinion.

# Commodities Included Under FTC Jurisdiction

- 1. Soaps and Detergents
  - a. Powder, flakes, chips, etc.
  - b. Liquid
  - c. Paste, cake, or tablet
- 2. Cleaning Compounds
  - a. Liquid
  - b. Powder
  - c. Paste or cake
  - d. Solvent and cleaning fluids for home use
- 3. Laundry Supplies
  - a. Conditioners and softeners, ironing aids, distilled water.
  - b. Sizings and starches
  - c. Bluings and bleaches
  - d. Pre-soaks, enzymes, etc.
- 4. Cleaning Devices
  - a. Sponges and Chamois
  - b. Steel wool, scouring, and soap pads
- 5. Food Wraps
  - a. Plastic and cellophane
  - b. Wax paper and paper
  - c. Foil Aluminum wrap
- 6. Paper Products
  - a. Toweling
  - b. Napkins, table cloths, and place mats
  - c. Facial tissues
  - d. Bathroom tissues
  - e. Disposable diapers
  - f. Crepe paper

g. Other, e.g., shelf paper, wrapping paper, eye glass tissues, etc.

#### 7. Waxes and Polishes

- a. Powder
- b. Liquid
- c. Paste and cake
- d. Other, e.g., polish impregnated cloths, scratch removers, etc.

#### 8. Household Supplies

- a. Matches
- b. Candles
- c. Toothpicks
- d. Cordage (string, twine, rope, clothes line, etc.)
- e. Drinking straws
- f. Lighter and propane torch fuel, flints, pipe cleaners, etc.
- g. Lubricants
- h. Picnic supplies
- i. Sand paper and emory paper
- j. Charcoal briquets, chips, logs, etc.
- k. Dyes and tints
- 1. Camera film and photo supplies and chemicals
- m. Protective fabric sprays
- n. Aluminum foil cooking utensils
- o. Christmas decorations
- p. Solder
- q. LPG for other than home heating or cooking
- r. Waxes for home use
- s. Light bulbs
- t. Dry cell batteries
- u. Pressure sensitive tapes, excluding gift tapes

#### 9. Containers

- a. Paper (plain, waxed, or plastic coated)
- b. Foil
- c. Plastic or styrofoam

#### 10. Air Fresheners and Deodorizers

- a. Potpourri
- 11. Adhesives and Sealants
- 12. Cordage

# Commodities Excluded from FTC Jurisdiction

ADHESIVE TAPE (FDA-D)

ALCOHOLIC BEVERAGES (BATF)

ALUMINUM CLOTHESLINE (plastic clothesline with a steel core) (CI)

ANTIFREEZE (CI)

ARTIFICIAL FLOWERS AND PARTS (CI)

AUTOMOTIVE ACCESSORIES (floor mats, seat covers, spare parts, etc.) (CI)

AUTOMOTIVE CHEMICAL PRODUCTS (auto polish, wax, and finish conditioner, rubbing compound, tire paint, chrome polish, gasoline additives, etc.) (CI)

BATH OIL AND BUBBLE BATH (FDA-C)

BICYCLE TIRES AND TUBES (CI)

BOOKS (CI)

BOTTLED GAS (cooking or heating) (CI)

BRUSHES (bristle, nylon, etc., including hair-brushes, toothbrushes, hand and nail brushes, paint brushes, etc.) (CI)

BROOMS AND MOPS (glass, floor, and dish mops, etc.) (CI)

"BUG PROOF" SHELF PAPER (EPA)

CANDLE HOLDERS (without candles) (CI)

CAMERAS (CI)

CHINAWARE (CI)

CHRISTMAS LIGHT SETS (replacement or other bulbs sold separately are not excluded) (CI)

CIGARETTE LIGHTERS (CI)

CLOTHESPINS (CI)

CLOTHING AND WEARING APPAREL (socks, gloves, shoelaces, underwear, etc.) (CI)

COMPACTS AND MIRRORS (CI)

COSMETICS (Defined by Section 201(i) of the Food, Drug, and Cosmetic Act as "(1) articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance, and (2) articles intended for use as a component of any such articles; except that such term shall not include soap.") (FDA-C)

COTTON PUFFS (Sterilized) (FDA-D)

CRYSTALWARE (CI)

DETERGENT BAR WITH ANY DRUG OR COSMETIC

CLAIM (If the observer experiences difficulty in ascertaining whether or not a given product is a soap or a detergent, contact the manufacturer or FDA.) (FDA-D or C) DECORATIVE MAGNETS (CI)

DEVICES (Defined by Section 201(h) of the Food, Drug, and Cosmetic Act as "instruments, apparatus, and contrivances, including their components, parts, and accessories, intended (1) for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; or (2) to affect the structure or any function of the body of man or other animals." This category includes trusses, syringes, arch supports, etc.) (FDA-DV) DIARIES AND CALENDARS (CI)

DISINFECTANTS (EPA)

DRUGS (Defined by Section 201(g) (1) of the Food, Drug, and Cosmetic Act as "(a) articles recognized in the official United States Pharmacopeia, official Homeopathic Pharmacopeia, or official National Formulary, or any supplement to any of them; and (b) articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals; and (c) articles (other than food) intended to affect the structure or any function of the body of man or other animals; and (d) articles intended for use as a component of any articles specified in clause (a), (b) or (c); but does not include devices or their components, parts, or accessories.") (FDA-D)

## DURABLE ARTICLES OR COMMODITIES (CI)

EPA COVERED PRODUCTS (Products subject to regulation under the Federal Environmental Pesticide Control Act that is administered by the Environmental Protection Agency.) (EPA)

FINGERNAIL FILES (CI)

FLOWERS, FLOWER SEEDS, FERTILIZER, AND FERTILIZER MATERIALS, PLANTS OR SHRUBS, GARDEN AND LAWN SUPPLIES (CI)

FOOD (Defined by Section 201(f) of the Food, Drug, and Cosmetic Act as "(1) articles used for food and drink for man or other animals, (2) chewing gum, and (3) articles used for components of any such article.") (FDA-F)

FOUNTAIN PENS, MECHANICAL PENCILS, AND KINDRED PRODUCTS (ball point pens, lead pencils, and lead refills, etc.) (CI)

GARDEN TOOLS (hose, trowels, grass clippers, etc.) (CI) GERMKILLING OR GERMPROOFING PRODUCTS (EPA)

GIFT TAPE AND TIES (ribbon, tape, etc.) (CI)

GIFT WRAPPING MATERIAL (decorative wrapping foil, paper, cellophane, etc.) (CI)

GLASSES AND GLASSWARE (disposable plastic glasses are not excluded) (CI)

GLOVES (of any type) (CI)

**GREETING CARDS (CI)** 

HAIR COMBS, NETS, and PINS (FDA-DV)

HAND TOOLS (CI)

HANDICRAFT AND SEWING THREAD (yarn, etc.) (CI) HARDWARE (extension cords, thumb-tacks, hose clamps, nails, screws, picture hangers, etc.) (CI)

HOUSEHOLD APPLIANCES, EQUIPMENT, OR FURNISHINGS, INCLUDING FEATHER AND DOWN-FILLED PRODUCTS, SYNTHETIC-FILLED BED PILLOWS, MATTRESS PADS AND PATCHWORK QUILTS, COMFORTERS, AND DECORATIVE CURTAINS (CI)

INK (CI)

INSECTICIDES (insect repellents in any form, mothballs, etc.) (EPA)

IRONING BOARD COVERS (CI)

JEWELRY (CI)

LAMBS WOOL DUSTERS (CI) LUGGAGE (CI)

MAGNETIC RECORDING TAPE (reels, cassettes, and cartridges.) (CI)

MEAT AND MEAT PRODUCTS (USDA)

METAL PAILS (CI)

MOTOR OIL (including additives. Household multipurpose oil is not excluded.) (CI)

MOUSE AND RAT TRAPS (CI)

MOUTHWASH (FDA-D)

MUSICAL INSTRUMENTS (CI)

PAINTS AND KINDRED PRODUCTS (wallpaper, turpentine, putty, paint removers, caulking and glazing compounds, wood fillers, etc. Note, however, that bathroom caulking materials, patching plaster, spackling compound, and plastic wood are not excluded. In the event of uncertainty, contact FTC.) (CI)

PAINTINGS AND WALL PLAQUES (CI)

PET CARE SUPPLIES (CI)

PEWTERWARE (CI)

PHOTO ALBUMS (CI)

PICTURES (CI)

PLASTIC BUCKETS AND GARBAGE CANS (CI)

PLASTIC TABLECLOTHS, PLASTIC PLACE MATS

PLASTIC SHELF LINING (CI)

PRE-MOISTENED TOWELETTES (FDA-C)

POLISHING CLOTHS (polishing cloths that are impregnated with polish or chemicals [silicone, etc.] are not excluded.) (CI)

POULTRY AND POULTRY PRODUCTS (USDA)

RUBBER GLOVES (CI) RUBBING ALCOHOL (FDA-D)

SAFETY FLARES (CI)

SAFETY PINS (CI)

SANITARY NAPKINS (FDA-D or C)

SCHOOL SUPPLIES (rulers, crayons, paper, pencils, etc.) (CI)

SELF STICK PROTECTIVE FELT TABS (CI)

SEEDS OF ALL KINDS (USDA)

SEWING ACCESSORIES (needles of any type, thimbles, kindred articles, etc.) (CI)

SHAMPOO (FDA-C or D)

SHOELACES (CI)

SMALL ARMS AMMUNITION (CI)

SILVERWARE, STAINLESS STEELWARE, AND PEWTERWARE (CI)

**SMOKING PIPES (CI)** 

SOAP BARS WITH A DRUG CLAIM (including any claim for removing facial blemishes, etc. Detergent Bars for further discussion in this area.)

(FDA-D)

SOAP DISHES (CI)

SOUVENIRS (CI)

SPORTING GOODS (CI)

STATIONERY AND WRITING SUPPLIES (looseleaf binders, paper tablets, etc.) (CI)

TEXTILES AND ITEMS OF WEARING APPAREL (cloth laundry bags, towels, cheese cloth, shoe shine cloths, etc.) (CI)

TOBACCO AND TOBACCO PRODUCTS (pipes, cigarettes, etc.) (BATF - USDA)

TOOTHPASTE (FDA-D)

TOYS (CI)

TYPEWRITER RIBBON (CI)

WIRE OF ANY TYPE (CI) WOODENWARE (CI)

## Size Descriptors for Raw, Shell-On Shrimp Products. --

## Guideline

If size descriptor terms for shrimp (e.g., small, medium, large, or colossal) are used on packages, advertisements, or on signs when offering shrimp for sale from bulk, a statement of count-per-kilogram, if sold by kilogram, or count-per-pound, if sold by pound, should be included adjacent to the size descriptor (e.g., medium-large, 31-40 shrimp per pound).

(Added 1995)

## 2.6.10. Model Guidelines for the Administrative Review Process. --

**Purpose.-** These guidelines are provided to assist weights and measures programs in establishing an administrative review process. They are not intended to be the only process an agency may use. Nor are they intended to supercede any agency's existing process. implementing ANYprocess it should be approved by legal counsel.

These guidelines ensure that persons affected by "inspection findings" (e.g., price misrepresentations or shortweight packages), or who are deprived of the use of their property (devices or packages placed under "stop" or "off-sale" order), are provided a timely-independent review of the action. The process enables affected persons to provide evidence which could be relevant in determining whether the enforcement action was proper. The purpose of the process is to ensure that a person's ability to conduct business is not hindered by improper enforcement actions. This process is independent of any

other action (e.g., administrative penalties, prosecutions, etc.) that may be taken by the enforcement agency.

Background.- In the course of their work, weights and measures officials take enforcement actions that may prohibit the use of devices or the sale of packaged goods (e.g., "stop-sale" or "off-sale" orders for packages and "stop-use" or "condemnation" tags issued on devices). Improper actions, (e.g., not following prescribed test procedures, enforcing labeling requirements on exempted packages, or incorrectly citing someone for a "violation"). place the official, and the jurisdiction in the position of being liable for the action if it is found that the action was "illegal." In some cases, weights and measures jurisdictions could be ordered to pay monetary damages to compensate the affected party for the improper action.

This process is one way to provide affected persons an opportunity to present evidence which may be relevant in determining whether the order or finding has been properly made to an independent party. The procedure enables business operators to obtain an independent review of orders or findings so that actions affecting their business can be evaluated administratively instead of through litigation. This ensures timely review, which is essential because of the impact that such actions may have on the ability of a business to operate, and in cases where perishable products may be lost.

**Review Provisions**. - Parties affected by enforcement actions must be given the opportunity to appeal enforcement actions.

- Inspectors are the primary contacts with regulated firms and thus are in the best position to ensure that the enforcement actions they take are "proper." "Proper" means that inspections are conducted (1) within the scope of the authority granted by law, (2) according to recognized investigative or testing procedures and standards, and (3) that enforcement actions are lawful. The "burden" for proving that actions are "proper" falls on the weights and measures program, not on regulated firms.
- Weights and measures officials are law enforcement officers. Therefore, they have the responsibility to exercise their authority within the "due process" provisions of the U.S. Constitution. As weights and measure programs carry-out their enforcement responsibilities in the future, more and more challenges to their actions and authority will occur. It is in the best interest of any program to establish strict operational procedures and standards of conduct to prevent the occurrence of improper actions which may place the jurisdiction in an untenable position in a court challenge of

an enforcement action. The foundation for ensuring "proper" actions is training, clear and concise requirements, and adoption of, and adherence to uniform test procedures and legal procedures.

- Prior to taking enforcement actions the inspector should recheck test results and determine that the information on which the action will be taken is accurate.
- Inspections shall be conducted with the understanding that the findings will be clearly and plainly documented and reviewed with the store's representative.
- During the review of the findings, the firm's representative may provide information which must be used by the inspector to resolve the problems and concerns before enforcement actions are taken. In some cases, the provided information may not persuade the inspector to forego the action. In some cases the inspector and business representative may not understand the circumstances surrounding the violations, or there may be a conflict between the parties that they cannot resolve. In other cases, the owner or manufacturer may not learn that an enforcement action has occurred until long after the inspector leaves the establishment.

## Steps:

- 1. Provide a framework that will help in resolving most of these situations where "due process" is of concern. Make sure that the responsible party (e.g., as declared on the package label) is notified of violations and receives copies of inspection reports. Establish standard operating procedures to assure the affected party of timely access to a representative of the weights and measures program so that the firm can provide the relevant information or obtain clarification of legal requirements.
- 2. Make the process as simple and convenient as possible. Especially in distant or rural areas where there are no local offices, the review should be conducted by a supervisor of the official taking the action if agreed to by the person filing the request for review.
- 3. The process should include notice that the firm can seek review at a higher level in the weights and measures program or an independent review by a third party. The following procedures are recommended:
- Any owner, distributor, packager, or retailer of a device ordered out of service, or item or commodity ordered "off-sale," or inspection finding (e.g., a price misrepresentation or a shortweight lot of packages) shall be entitled to a timely review of such order, to a prompt,

impartial, administrative review of such off-sale order or finding.

A notice of the right to administrative review should be included on all orders or reports of findings or violations and should be communicated to the responsible firm (e.g., person or firm identified on the product label):

## Sample Notice

You have the right to Administrative Review of this order or finding. To obtain a review, contact the Director of Weights and Measures by telephone or send a written request (either postmarked, faxed, or hand delivered) to:

(Name, Address or Fax Number of the Director or other Designated Official)

Your request should reference any information that you believe supports the withdrawal or modification of the order or finding.

- -The administrative review shall be conducted by an independent party designated by the Director or before an independent hearing officer appointed by the Department. The officer shall not be a person responsible for weights and measures administration or enforcement.
- No fees should be imposed for the administrative review process.
- The firm responsible for the product or the retailer may introduce any record or other relevant evidence.

## For example:

- (i) Commodities subject to the off-sale action or other findings were produced, processed, packaged, priced, or labeled in accordance with applicable laws, regulations or requirements.
- (ii) Devices subject to the "stop-use" order or "condemnation" were maintained in accordance with applicable laws, regulations or requirements.
- (iii) Prescribed test procedures or sampling plans were not followed by the inspector.
- (iv) Mitigating circumstances existed which should be considered.

- The reviewer must consider the inspector's report, findings, and actions as well as any evidence introduced by the owner, distributer, packager, or retailer as part of the review process.
- The reviewer must provide a timely written recommendation following review unless additional time is agreed to by the department and the petitioner.
- The reviewer may recommend to the Department that an order be upheld, withdrawn or modified. If justified the reviewer may recommend other action including a reinspection of the device or commodity based upon information presented during the review.
- All actions should be documented and all parties advised in writing of the results of the review. The report of action should be detailed in that it provides the reasons for the decision.

## 2.6.11. Good Quantity Control Practices. --

Good Quantity Control Practices means that the plant managers should take all reasonable precautions to ensure the following quantity control standards or their equivalent are met:

- 1. A formal quantity control function is in place with authority to review production processes and records, investigate possible errors, and approve, control, or reject lots.
- 2. Adequate facilities (e.g., equipment, standards and work areas) for conducting quantity control functions are provided and maintained.
- 3. A quantity control program (e.g., a system of statistical process control) is in place and maintained.
- 4. Sampling is conducted at a frequency appropriate to the product process to ensure that the data obtained is representative of the production lot.
- 5. Production records are maintained to provide a history of the filling and net content labeling of the product.
- 6. Each "production lot" contains on the average the labeled quantity and the number of packages exceeding the specified maximum allowable variation (MAV) value in the inspection sample shall be no more than permitted in Tables 2-1 and 2-2 in NIST Handbook 133.
- 7. Packaging practices are appropriate for specific products and measurement procedures (e.g., quantity sampling, density and tare determinations) and guidelines for recording and maintaining test results are documented.

- 8. Personnel responsible for quantity control follow written work instructions and are competent to perform their duties (e.g., background, education, experience and training). Training is conducted at sufficient intervals to ensure good practices.
- 9. Recognized procedures are used for the selection, maintenance, adjustment, and testing of filling equipment to insure proper fill control.
- 10. Weighing and measuring devices are suitable for their intended purpose and measurement standards are suitable and traceable to national standards. This includes a system of equipment maintenance and calibration to include recordkeeping procedures.
- 11. Controls over automated data systems and software used in quantity control ensures that information is accessible, but changeable only by authorized personnel.
- 12. Tare materials are monitored for variation. Label changes are controlled to ensure net quantity matches labeled declaration.

## 2.6.12. Point-of-Pack Inspection Guidelines. --

## A. Weights and Measures Officials' Responsibilities

- 1. Conduct inspections during hours when the plant is normally open for business. Open the inspection by making contact with the plant manager or authorized representative (e.g., the quality assurance manager or the production manager).
- 2. Present the proper credentials and explain the reason for the visit (e.g., routine or follow-up inspection or consumer complaint, etc.).
- 3. Request access to quantity measurement equipment in the packing room, moisture testing equipment in the laboratory or in the packing room, and to product packed on premise or stored in warehouse areas.
- 4. Obtain permission from a plant representative, prior to using a tape recorder or a camera.
- 5. Conduct inspection related activities in a professional and appropriate manner and, if possible, work in an area that will not interfere with normal activities of the establishment.
- 6. Abide by all the safety and sanitary requirements of the establishment, and clean the work area upon completion of the inspection/test. Return borrowed equipment and materials

- 7. To close the inspection, recheck inspection reports in detail and ascertain that all information is complete and correct.
- 8. Sample questions and tasks for Inspectors:
- a. Inside Buildings and Equipment.
- (i) Is all filling and associated equipment in good repair?
- (ii) Are net content measurement devices suitable for the purpose being used?
- (iii) Are standards traceable to NIST used by the firm to verify device accuracy?
- b. Packing Room Inspection.
- (i) Observe if the program for net quantity of content control in the packing room is actually being carried out.
- (ii) Ensure that the weighing systems are suitable and tare determination procedures are adequate. If there are questions regarding tare determination, weigh a representative number of tare and/or filled packages.
- (iii) For products labeled and filled by volume and then checked by weight, ensure that proper density is used.
- c. Warehouse Inspection.

If an inspection is conducted:

- (i) Select lot(s) to be evaluated.
- (ii) Determine the number of samples to be inspected. Use the appropriate sampling plan as described in NIST Handbook 133.
- (iii) Randomly select the number of samples or use a mutually agreed on plan for selecting the samples.
- (iv) Determine the average net quantity of the sample and use the standard deviation factor to compute the Sample Error Limit (SEL) to evaluate the lot.
- (v) Look for individual values that exceed the applicable Maximum Allowable Variation as found in NIST Handbook 133.
- (vi) Apply moisture allowances, if applicable.
- (vii) Review the general condition of the warehouse relevant to package integrity, good quantity control, and distribution practices.

- (viii) Prepare an inspection report to detail findings and actions.
- 9. Closing the Inspection Review findings with Plant Representative.

After the inspection, meet with the management representative to discuss inspection findings and observations. Provide additional information as needed (e.g., information on laws and regulations or explanations of test procedures used in the inspection). Be informative, courteous and responsive. If problems/violations are found during the inspection/test, bring them to the attention of the appropriate person.

## **B. Plant Management Responsibilities**

- 1. Recognize that inspectors are enforcing a Federal, State or Local law.
- 2. Assist the official in conducting inspection activities in a timely and efficient manner.
- 3. During the initial conference with the inspector, find out whether the inspection is routine, a follow-up, or the result of a consumer complaint. If a complaint, obtain as much information as possible concerning the nature of the complaint, allowing for an appropriate response.
- 4. The plant manager, quality assurance manager, or any designated representative should accompany the inspector.
- 5. Plant personnel should take note of the inspectors comments during the inspection and prepare a detailed writeup as soon as the inspection is completed.
- 6. When an official presents an inspection report, discuss the observations and, if possible, provide explanations for any changes deemed necessary as a result of the inspection/test.

# Plant Management: information that must be shared with the Inspector.

- 1. Establishment name and address.
- 2. Type of firm and information on related firms or applicable information (e.g., sub contractor, servant or agent).
- 3. General description and location of shipping and storage areas where packaged goods intended for distribution are stored.
- 4. Commodities manufactured by or stored at the facility.
- 5. Names of responsible plant officials.

# Plant Management: information that may be shared with the Inspector.

- 1. Simple flow sheet of the filling process with appropriate net content control checkpoints.
- 2. Weighing or measuring device maintenance and calibration test records.
- 3. Type of quantity control tests and methods used.
- 4. Net content control charts for any lot, shipment, or delivery in question or lots which have previously been cited.
- 5. Method of date coding the product to include code interpretation.
- 6. Laboratory reports showing the moisture analysis of the products which are in question or have been previously cited.
- 7. Product volume of lot sizes or related information.
- 8. Distribution records related to a problem lots including names of customers.

# 2.6.13. Guideline for Verifying the Labeled Basis Weight of Communication and Other Paper

#### **2.6.13.1.** Equipment

- Linear measure recommended in Section 5.3.1. Equipment in the Third Edition of NIST Handbook 133 "Checking the Net Contents of Packaged Goods."
- Scale with a minimum division of 0.5 g (0.001 lb) or less.
- Scientific calculator with a sample standard deviation function.

## 2.6.13.2. Scope and Recommended Enforcement Approach. - Paper is manufactured in various "basis weights" for use in different applications (e.g., copy paper can have a basis weight of 18 or 20 lbs.) Basis weight is part of the product identity and not a declaration of net contents. This procedure is used to audit the basis weight declared on package labels. If the tested packages in a sample do not have an average basis weight equal to or greater than the labeled basis weight, the inspection lot may be in violation. A potentially violative lot should be placed "off-sale" until the owner provides documentation to confirm that the labeled basis weight corresponds to the basis weight declared by the original manufacturer. If documentation is not provided, the inspection lot should remain "off-sale" until the basis weight declaration is corrected.

2.6.13.3. Determine Target Net Weight for Common Types of Paper. - The basis weight of paper is the designated weight (measured in grams or pounds per specified area) of one ream in basic sheet size for the type of paper being tested. This procedure permits the confirmation of basis weight by linear measurement and gravimetric testing. This procedure is designed to test the various types, size, count, and basis weights of packaged paper currently in the marketplace. Table 1 lists the "area of basic sheet size" for common types of paper. A "ream" equals 500 sheets of basic sheet size for all types of paper other than tissue paper. A "ream" of tissue paper equals 480 sheets. Each of the standard categories of paper products shown in Table 1 has a different standard basic sheet size. Although there are basic sheet sizes, paper is packaged and marketed in various sizes and counts. The net weight of packaged paper can be determined from the label information using the General Formula for Sheet Paper. For roll paper, use one (1) for the sheet count.

## **General Formula for Sheet Paper**

$$\frac{PA \times BW}{BSS} \times \frac{SC}{500} = TNW$$

Where:

PA = measured area of one sheet of paper

BW = labeled basis weight

BSS = area of basic sheet size from Table 1.

SC = labeled package sheet count TNW = target net weight of paper

**2.6.13.4. Test Procedure.** - The following gravimetric, measuring, and counting procedures shall be used to determine if packages are accurately labeled. Procedures are also provided for verifying net quantity of content declarations for count and dimensions (e.g., length and

width.)

**2.6.13.4.1. Sample Selection.** - Select a sample from an inspection lot using Table 2-1 Sampling Plans of Category A (page B-2) in the Third Edition of NIST Handbook 133 "Checking the Net Contents of Packaged Goods." Determine an average tare weight in accordance with 4. Tare Procedures in Section 3 Core Method for Checking the Net Contents of Packaged Goods in the 4<sup>th</sup> Supplement to the Third Edition of NIST Handbook 133.

**2.6.13.4.2. Determine Target Net Weight of Common Types of Paper Packaged in Various Sizes or Counts.** - Verify the basis weight declared on a package using the following gravimetric procedure:

a. Record the following information from the package label on a worksheet. (See Figure 1 for a sample label.)

- 1. Type of Paper (TP)
- 2. Length (L)
- 3. Width (W)
- 4. Package Sheet Count (PSC)
- 5. Basis Weight (BW)
- 6. Basic Size Sheet (BSS)

## Example

White Copy Paper 75 g/m<sup>2</sup> (20 lb) Bond

Size: 216 mm x 279 mm (8½ in x 11 in)

Count: 500 sheets

Figure 1. Sample Label

b. Compute the Target Net Weight (TNW) for the sample packages using the General Formula for Sheet Paper. TNW is what the paper should weigh if the labeled properties of the packaged paper are accurate.)

c. Determine the average net weight of the sample packages. (Do not use sample error limit calculations.) If the average net weight is not equal to or more than the Target Net Weight, go to Section 2.6.14.3. to determine if the labeled basis weight (BW) is correct. If the average net weight is equal to or more than the labeled basis weight, the sample passes.

## Basis Weight Worksheet (see Figure 1)

Type of Paper (TP): Copy Paper Length (L): 11 in

$$\frac{(93.5in^2x20lb)}{374in_4^2} x \frac{500}{E} = 5lb$$

Width (W):  $8\frac{1}{2}$  in Area (PA) of Sheet (LxW): 93.5 in<sup>2</sup> Package Sheet Count (PSC): 500 Basis Weight (BW): 20 lb Basic Sheet Size (BSS): 17 in x 22 in by calculation: 374 in<sup>2</sup>

Use the General Formula to compute Target Net Weight (TNW):

Target Net Weight (TNW) = 5 lb

**Note:** Three factors will cause actual sample weights to differ from the TNW:

Actual sheet count in package Actual basis weight of paper being tested

**2.6.13.4.3. Determine Basis Weight.** - This procedure is used to identify potentially violative packages. If the Average Basis Weight (ABW) for the sample determined by this procedure is not equal to or greater than the labeled basis weight, other steps must be taken. Moisture affects the weight of paper, but the moisture content of paper can only be determined in a measurement laboratory according to American Society of Testing and Materials D 646 - 95, "Standard Test Method for Grammage of Paper and Paperboard (Weight Per Area Unit.)"

- a. Verify the basis weight for each package according to the following steps:
- i. Identify the paper type from Column 1 in Table 1, and record the area for the paper type from Column 2
- ii. Select a sample of paper from each of the tare sample packages. Use a sample of exact count to eliminate the possibility that the packages are short count.
- For packages with more than 100 sheets, use 100 sheets, or

- For packages with 100 sheets or less, verify the sheet count and use all of the sheets.
- iii. Use a basis weight work sheet and determine the number of basic size sheets the paper sample represents with the following formula:

Where:

A = area of basic sheet size from Table 1 PA = area (l x w) of one sheet of paper EC = exact sheet count of sample

ENBSS = equivalent number of basic size sheets

iv. Determine the average basis weight, where:

BW = basis weight for each package

ABW = average basis weight

ENBSS = equivalent number of basic size sheets from

step iii.

NW = net weight of sample

RC = Ream Count (500; for tissue paper use 480)

$$\frac{NW \times RC}{FNRSS} = BW$$

Table 1. Common Types of Paper and Area of Basic Sheet Size	
Paper Type	Area
Bond, Ledger, Thin, Writing, and Track Feed Printer Paper	2412 cm <sup>2</sup> (374 in <sup>2</sup> )
Manuscript Cover	3599 cm <sup>2</sup> (558 in <sup>2</sup> )
Blotting	2941 cm <sup>2</sup> (456 in <sup>2</sup> )
Cover	3354 cm <sup>2</sup> (520 in <sup>2</sup> )
Blanks	3974 cm <sup>2</sup> (616 in <sup>2</sup> )
Printing Bristols	4135 cm <sup>2</sup> (641 in <sup>2</sup> )
Wrapping, Tissue, Waxed, Newsprint and Tag Stock	5574 cm <sup>2</sup> (864 in <sup>2</sup> )
Book, Offset, and Text	6129 cm <sup>2</sup> (950 in <sup>2</sup> )
Index Bristol	5019 cm <sup>2</sup> (778 in <sup>2</sup> )

v. Repeat this step for each paper package from the tare sample and average the basis weights to obtain an Average Basis Weight (ABW.) If the ABW is less than the labeled

basis weight, or if the difference between the basis weight of the sample packages is more than 1 scale division, measure and compute the basis weight for each of the remaining packages.

- vi. Weigh each sample. If the basis weight from step iv is less than the labeled basis weight, re-calculate the target net weight by using the general formula for sheet paper.
- vii. Use the target net weight computed in step vi and reweigh the inspection lot samples using the Section 3. Core Method for Checking the Net Contents of Packaged Goods in the 4<sup>th</sup> Supplement to the Third Edition of NIST Handbook 133. If inspection sample weights differ from the target net weight computed using the average basis weight determined in vi, the label sheet count is probably inaccurate.
- b. Verify the label sheet count by counting the number of sheets in each package.
- c. Verify sheet dimensions (length x width) for each package of the sample.

## 2.6.13.4.3.1. Other Types Packaged Paper

- 1. Roll Paper.- When testing rolled paper, cut a length of paper from the roll equal to 9,350 divided by the width of the paper in inches. Make sure the ends of this length of paper are square. Proceed to section 2.6.14.3 step a. Disregard the exact sheet count in step iii.
- 2. Continuous Track Feed Printer Paper:
- i. Count out a sample of 100 sheets from each tare sample package of the inspection lot.
- ii. Weigh each 100 sheet sample and record the weights.
- iii. Calculate an average weight.
- iv. Remove printer track feed strips from each sample.
- v. Re-weigh each sample after the tractor feed has been removed and record the weights.
- vi. Calculate an average weight from step v.
- vii. Calculate percentage (%) difference in the average weights in steps iii and vi.
- viii. After the track feed strips have been removed, use the samples to verify the basis weight for the packages of the inspection lot using the formula in 2.6.14.2. If the basis weight is less than the labeled basis weight, refer to 2.6.13.2.

- ix. If the basis weight established in step viii is the same as the labeled basis weight, weigh the remaining packages from the sample and compare the actual net weights with the TNW. (Remember to adjust the TNW up by the percentage established in step vii.)
- x. If the adjusted weights of the remaining samples is less than the TNW, the deficiency may have been caused by:
- a. The sheet count in the package.
- b. The basis weight of the paper.
- c. The dimensions of the paper.
- d. Combinations of the above.

This procedure is for use in verifying that the basis weight included in a statement of identity is not misleading or deceptive. It is <u>not</u> intended to be used as the final criterion on which enforcement action is taken. Instead, the test procedure is only used to identify potentially violative lots. There are two alternative actions that can be taken if the test results indicate that a lot is potentially violative. The first is to review the documentation supplied by the original manufacturer to the converter to determine if any misrepresentations has occurred. The second is to collect packages of the paper and test them according to the latest version of American Society of Testing and Materials Standard Method D-646 for "Grammage of Paper and Paperboard."

## 2.6.14. Labeling Guidelines for Chamois

These requirements are based on the Uniform Packaging and Labeling Regulation in the 1999 Edition of NIST Handbook 130 "Uniform Laws and Regulations" and regulations and guidelines of the Federal Trade Commission.

## General

The following information must be declared on the principal display panel of the chamois package. The principal-display-panel is the tag, or label that consumers can examine under normal and customary conditions of display.

- Identity what the package contains
- Net Quantity of Contents how many items the package contains and the area of the item(s)

The following information may appear any where on the package.

• Responsibility - the party responsible for packaging or distributing the product.

**2.6.14.1. Declaration of Identity. -** Chamois is a natural product made of sheepskin which has been oil-tanned. In 1964, the Federal Trade Commission issued an advisory opinion stating that using the word "chamois" on a product (e.g, "Artificial" Chamois, "Synthetic" Chamois, "Pig Chamois" or "Man-Made" Chamois) that is not made from oil-tanned sheepskin is an unlawful and deceptive. Packages are required to declare identity in terms of (i) the name specified in or required by any applicable Federal or State law or regulation or, in the absence of this, (ii) the common or usual name or, in the absence of this, (iii) the generic name or other appropriate description, including a statement of function.

For example: Chamois, Natural Chamois Leather

**2.6.14.2. Declaration of Net Quantity of Contents.** - The following information is required to appear on the lower 30 percent of the principal display panel of all packages:

Count

The package must include a count declaration (e.g., 1 Chamois) unless the statement of identity clearly expresses the fact that only one unit is contained in the package. A package containing two or more units shall bear a statement in terms of count (e.g., 2 Chamois).

• Area

Chamois packages must have area declarations in both inch-pound and metric units.

## Metric

- for areas that measure less than 1 square meter, the area shall be stated in square decimeters and decimal fractions of a square decimeter, or in square centimeters and decimal fractions of a square centimeter;
- for areas that measure 1 square meter or more, the area shall be stated in square meters and decimal fractions to not more than three places.

To facilitate value comparison and simplify the measurement process, chamois should be measured in one-quarter square foot (2.32257 decimeter) increments. Dimensions should be rounded down to avoid overstating the area.

For example: 2 square feet (18.5 square decimeters) or  $2 \text{ ft}^2$  (18.5 dm<sup>2</sup>)

Conversion Factors:

1 square foot =  $9.29030 \text{ dm}^2$ 

1 square inch =  $6.4516 \text{ cm}^2$ 

1 square yard =  $83.6127 \text{ dm}^2$ 

#### **Inch-Pound Units**

- for areas that are, less than 1 square foot (929 cm²), the area declaration shall be expressed in square inches and fractions of square inches;
- for areas of 1 square foot (929 cm²), or more, but less than 4 square feet (37.1 dm²), the area shall be expressed in square feet with any remainder expressed in square inches or in fractions of a square foot;
- for areas of 4 square feet (37.1 dm²) or more, the area should be expressed in terms of the largest whole unit (e.g., square yards, square yards and square feet, or square feet) with any remainder expressed in square inches and fractions of a square inch, or in fractions of the square foot or square yard.

Chamois labeled for retail sale is exempt from these requirements if the area of a full skin is expressed in terms of square feet with any remainder in terms of the common or decimal fraction of the square foot (929 cm²) or, (b) the area for cut skins of any configuration is expressed in terms of square inches and fractions thereof. Where the area of a cut skin is at least one square foot (929 cm²) or more, the statement of square inches shall be followed in parentheses by a declaration in square feet with any remainder in terms of square inches or common or decimal fractions of the square foot.

## **Prohibited Labeling Practices**

- Do not use qualifying terms or phrases (e.g., "Approximate Size," "Size when Wet," "Up to 20% Larger When Wet").
- Do not use unacceptable symbols (e.g., using (") to indicate inches.

**2.6.14.3. Declaration of Responsibility.** - The name and address of the manufacturer, packer, or distributor must be conspicuously specified on the label of any package that is kept, offered, or exposed for sale, or sold anywhere other than the premises here packed. The name shall be the actual corporate name, or, when not incorporated, the name under which the company does business. This declaration does not have to appear on the principal-display-panel.

For example:

Chamois Tanning Company 8190 Main Road Tarpon Springs, Florida 34568 The address shall include street address, city, State (or country if outside the United States), and Zip Code (or the postal code if any, used in countries other than the United States); however, the street address may be omitted if it is shown in a current city directory or telephone directory.

#### Sample Labels

1. If one natural chamois is in a see-through package, the following label would be acceptable:

## **Natural Chamois Leather**

Distributed by: Chamois Leather Co. 8190 Main Road Tarpon Springs, Florida 34568

7 sq ft (65 dm<sup>2</sup>)

2. The next sample would apply if one chamois is in a package and the statement of identity does not clearly express the fact the package only contains one unit.

## Chamois

Chamois Leather Company 8190 Main Road Tarpon Springs, Florida 34568

One Chamois

3 sq ft (27.8 dm<sup>2</sup>)

# 2.6.15. Labeling Guidelines for Natural and Synthetic Sponges

These requirements are based on the Uniform Packaging and Labeling Regulation in the 1999 Edition of NIST Handbook 130 "Uniform Laws and Regulations" and regulations and guidelines of the Federal Trade Commission. All indicated dimensions and conversions from metric to inch-pound units are approximates only and are used for illustration purposes only.

## General

The following information must be declared on the principal-display-panel (PDP) of a package of sponge(s). The PDP is the part of label (or package) most likely to be

displayed, presented, shown to or examined by consumers. A tag or spot label may be used.

- Identity what the package contains
- Net Quantity of Contents how many items in the package and the dimensions of the item(s)

The following information may appear anywhere on the package.

• Responsibility - the name of the processor or distributor

## 2.6.15.1. Declaration of Identity. -

a. A declaration of identity that clearly describes the origin and other relevant information about the sponge must appear on the label of each package. The identity of a sponge must include information about its origin (i.e., is it a natural or synthetic sponge). The identity shall be in terms of (i) the name specified in or required by applicable Federal or State law or regulation or, (ii) the common or usual name or, (iii) the generic name or other appropriate description.

## For example:

Sea Wool Sponge, Rock Island Sponge, Sea Grass Sponge, Sea Yellow Sponge, or Atlantic Silk Sponge

- Origin Natural or Synthetic
- For natural sponges, the label must specify if they are "Cut" or "Form." "Cut" sponges are those that have been cut into halves, quarters, or fourths while "forms" are whole sponges.
- For natural sponges, indicate type of sponge (e.g., "silk," "seawool," or "yellow")

#### b. Identifiers

- Terms which indicate locations of origin on some natural sponges (e.g., "Atlantic Sea Sponge") are permitted to be used for identification if they accurately describe the source of the sponge.
- Use of terms that may be interpreted by consumers to imply quality, durability, or "expert" endorsement (e.g, "professional quality sponge") are permitted as identifiers if they are not misleading. However, terms that imply quality should be used with care if they are not based on a recognized grading system. Use of terms to describe sponge texture such as "fine" "medium" or "coarse" are acceptable.

## 2.6.15.2. Declaration of Net Quantity of Contents. -

The following information must appear on the lower 30 percent of the principal display panel of all packages:

#### • Count

The package must include a count declaration (e.g., 1 sponge) unless the statement of identity clearly expresses the fact that only one unit is contained in the package. A package containing two or more units shall bear a statement in terms of count (e.g., 2 sponges).

## Dimensions

- The package must include the dimensions of the sponges in inches and centimeters.

To facilitate value comparison and simplify the measurement process, sponges should be measured in one-half inch (one-centimeter) increments. Dimensions should be rounded down to avoid overstating the size of a sponge.

For example: 6 in, 6-1/2 in, and 7 in for inch declarations; 15 cm, 16 cm, and 17 cm for metric declarations

- Synthetic sponges: the dimensions shall include length x width x height (thickness). Either unit of measure can be the primary declaration (e.g., the metric or inch-pound units can be presented first).
- 1 Sponge 17 x 10 x 5 cm (7 x 4 x 2 in)
- Natural sponges: the declaration shall be a single measurement representing the maximum dimension of one axis of a sponge that is passed through a circular template. When measured, the sponge is "classified" as a specific size when at least three, (including two opposing) points of the sponge touch the template (e.g, see graphic on the following page where the sample sponge is designated as a 7- inch (17 cm) sponge).

As the following pictures show, natural sponges are irregular in size and shape and have traditionally been measured using this procedure. It is difficult to develop a meaningful or cost effective measurement process that would provide a means of direct comparison between synthetic and natural sponges based on dimensions. Requiring declarations, such as average height, length, or width of natural sponges procedures, would increase the costs for industry and consumers.



Sea Wool Sponges

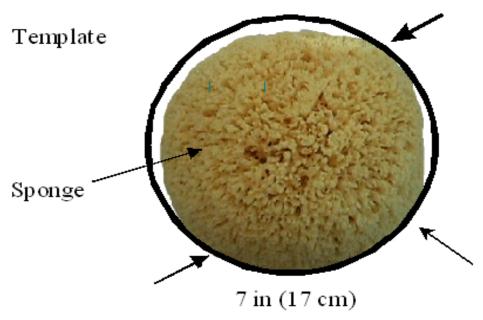


Silk Sponges

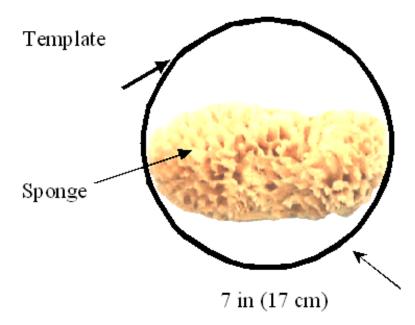


Sea Grass Sponges

• This graphic illustrates an irregular form of a natural sponge passing through a 7-inch (17 cm) template and touching at least 2 opposite points. This sponge could be labeled 7-inches.

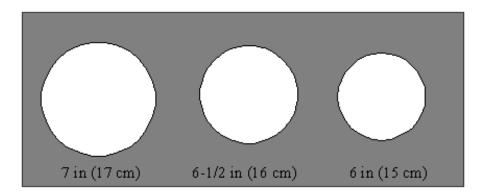


• For banana sponges the size will be determined as shown below. This sponge is 7- inches (17 cm).



## **Good Measurement Practice**

- Dimensions are determined with the sponge wet.
- Measuring templates (see photo below for the currently used type templates):



- should be constructed of rigid metal or plastic material.
- circular openings should graduated in increments of one-half inch (one centimeter)
- The error in the circular openings shall not be greater than  $\pm 1/32$  inch ( $\pm 0.79$  mm) as specified in Table 2. Tolerances in Section 5.52. Linear Measures of NIST Handbook 44" Specifications, Tolerances, and Technical Requirements for Weighing and Measuring Devices."



## **Prohibited Labeling Practices**

- Stating country of origin declarations that are not accurate.
- Declaring ranges of dimensions (e.g., 4"- 5" inches) or using terms such as "half or semi-form" instead of either "cut" or "form."
- Using qualifying terms (e.g., "Wet Size," "Approximate" or "Jumbo")
- "Anti-bacterial" claims must meet Environmental Protection Agency requirements.
- Using type size that does not meet minimum height requirements.
- Using unacceptable symbols (e.g., 2, using (") for inches is not acceptable)

## 2.6.15.3. Declaration of Responsibility. -

The name and address of the processor or distributor must be specified on the label of any package that is kept, offered, or exposed for sale, or sold anywhere other than the premises where packed. The name shall be the actual corporate name, or, when not incorporated the name under which the business is conducted. For example:

> Processed by Argonaut Sponge Company 8190 Main Road Tarpon Springs, Florida 34568

The address shall include street address, city, State (or country if outside the United States), and Zip Code (or the postal code if any, used in countries other than the United States); however, the street address may be omitted if this is shown in a current city directory or telephone directory.

## Sample Labels

## **Yellow Sponge Cut**

Argonaut Sponge Company 8190 Main Road Tarpon Springs, Florida 34568

One - 17.5 cm (7 in)

If a natural sponge is in a box, carton, or package that does not permit consumers to see how many sponges are in the box, the package must include a count declaration (e.g., 1 sponge) unless the statement of identity clearly expresses the fact that only one unit is contained in the package. A package containing two or more units shall bear a statement in terms of count (e.g., 2 sponges). The following sample label would apply.

## **Synthetic Sponge**

Made by: Argonaut Sponge Company 8190 Main Road Tarpon Springs, Florida 34568

 $17.7 \times 10 \times 5 \text{ cm}$  (7 x 4 x 2 in)

If a package does not permit the consumer to see how many sponges are the box, it must include a count declaration (e.g., 1 sponge) unless the statement of identity clearly expresses the fact that only one unit is contained in the package. A package containing two or more units shall bear a statement in terms of count (e.g., 2 sponges). A transparent bag of small pieces of sponge may be sold on the basis of count if the words "Irregular Dimensions" appear in conjunction with the declaration of count (e.g., 10 Sponges - Irregular Dimensions.)

## **Synthetic Sponge**

Made by: Argonaut Sponge Company 8190 Main Road Tarpon Springs, Florida 34568

1 - Sponge 17.7 x 10 x 5 cm (7 x 4 x 2 in)

Interpretations and Guidelines